HERBERT HÄRTEL

EXCAVATIONS AT SONKH

MONOGRAPHIEN ZUR INDISCHEN ARCHÄOLOGIE,
KUNST UND PHILOLOGIE

BAND 9

MONOGRAPHIEN ZUR INDISCHEN ARCHÄOLOGIE, KUNST UND PHILOLOGIE

Herausgegeben
im Auftrag des Stiftungsrates der Stiftung Ernst Waldschmidt
von der Direktorin des Museums für Indische Kunst
der Staatlichen Museen zu Berlin – Preußischer Kulturbesitz

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BAND 9

HERBERT HÄRTEL

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2500 YEARS OF A TOWN IN MATHURA DISTRICT

With contributions by
Hans-Jürgen Paech and Rolf Weber

DIETRICH REIMER VERLAG
BERLIN 1993

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

Excavations at Sonkh : 2500 years of a town in Mathura District / Herbert Härtel. With contributions by Hans-Jürgen Paech and Rolf Weber. – Berlin : Reimer, 1993
(Monographien zur indischen Archäologie, Kunst und Philologie; Bd. 9)
ISBN 3-496-02503-4
NE: Härtel, Herbert; Paech, Hans-Jürgen; Weber, Rolf; GT

© 1993 by Dietrich Reimer Verlag
Dr. Friedrich Kaufmann
Unter den Eichen 57
1000 Berlin 45

Gesamtherstellung: Reiter-Druck, Berlin

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Printed in Germany

ISBN 3-496-02503-4

Dedicated
to the Indian officials and colleagues
who supported this excavation venture,
in particular to the then Directors
of the Government Museum Mathura,
the learned Doctores N. P. JOSHI and R. C. SHARMA

LIST OF ABBREVIATIONS

a) Publications

AI	Ancient India. Bulletin of the Archaeological Survey of India
ASIAR	Annual Reports (of the) Archaeological Survey of India
DMC	H. N. Wright. The Coinage and Metrology of the Sultans of Delhi. Delhi 1936
IMC	J. Allan. The Coins of the Native States of India. Catalogue of Coins in the Indian Museum Calcutta, vol. IV. Oxford 1928.
JASB	Journal of the Asiatic Society of Bengal
JBRS	Journal of the Bihar Research Society
JNSI	Journal of the Numismatic Society of India
JUPHS	Journal of the U. P. Historical Society
LMC	C. J. Brown. Coins of the Mughal Emperors. Catalogue of Coins in the Provincial Museum Lucknow. Oxford 1920.
MASI	Memoirs of the Archaeological Survey of India
MNSI	Memoirs of the Numismatic Society of India
SAA 1973	South Asian Archaeology 1973, ed. J. E. van Lohuizen-de Leeuw & J. M. M. Ubaghs. Papers from the Second International Conference of the Association for the Promotion of South Asian Archaeology in Western Europe held at the University of Amsterdam. Leiden 1974.

b) Subjects

BRW	Black-and-Red Ware
CGW	Coarse Grey Ware
DMM	Durgā Mahiṣāsuramardinī
FS	Find Spot
L.	Level
NBPW	Northern Black Polished Ware
PGW	Painted Grey Ware

To the attention of the reader:

The descriptive text for the large number of find objects illustrated in this volume is placed, as a rule, at the beginning of each subject group. In the case of the largest groups, e.g. terracotta figurines, the text is arranged periodwise.
Black number fields on the relevant pages indicate the find groups according to the following list:

1 Terracotta Human Figurines
2 Terracotta Animal Figurines
3 Terracotta Votive Tanks
4 Terracotta Toy-carts
5 Terracotta Wheels
6 Terracotta Discs
7 Terracotta Spindle-whorls
8 Terracotta Skin-rubbers
9 Terracotta Dabbers
10 Terracotta Reels
11 Terracotta Game Pieces
12 Terracotta Balls
13 Terracotta Bangles
Terracotta Amulet and Pendants
Terracotta Rattles
Miscellaneous Terracotta Objects
14 Stone Sculptures
Grey Stone Plaques
Miscellaneous Stone Reliefs
15 Stone Trays
Stone Caskets and Lids
16 Hand-Mill Stones
Stone Balls
Other Stone Implements
Miscellaneous Stone Objects
17 Objects of Bone, Shell, Glass and Ivory
18 Metal Images
19 Metal Objects
Objects of Gold and Silver
Jewelry Moulds
20 Beads
21 Seals and Seal-Impressions
Other Inscribed Objects
22 Coins
Coin-Moulds
23 Some Structural Objects
24 Decorated Pottery
Potter's Stamps
25 Pottery

Part II: Site of the Apsidal Temple no. 2

26 Sculptures of the Gate
Miscellaneous Stone Sculptures
Sculptures of the Railing
27 Terracotta Moulds and Figurines
Miscellaneous Terracotta Objects
28 Objects of Metal, Bone and Stone
29 Coins
30 Decorated Pottery
Pottery Objects
Pottery

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PREFACE AND ACKNOWLEDGMENTS

The present report on the excavations at the mound of Sonkh, District Mathura, incorporates a detailed account of the material remains unearthed in eight seasons (1966–74) by a team of German archaeologists sent out by the Museum of Indian Art, Berlin, under the direction of the author. It replaces the more than 20 campaign and preliminary articles in journals published through the years.

The main objective of the excavation was to collect material informations on the early history of the once-flourishing State of Mathura, one of the most important cultural centres of ancient India. Explorations led to the decision that a thorough excavation of a less disturbed mound outside of Mathura would be more promising than a place in the city itself. The choice fell on the mound of Sonkh which, in spite of visible damages in the upper part of the citadel elevation, showed signs of presumably intact strata of habitation in its base. These expectations came true. The excavations resulted in a terrace-like exposition of not less than 40 habitation levels covering the span from the 8th century BC up to the 19th century AD. The colonization began in the time of the Painted Grey Ware which in Sonkh, according to radiocarbon dates, lasted from about 800 to 400 BC. The excavated structural remains reach in uninterrupted sequence from the PGW period via the mud wall and mud-brick settlements of the period of the Mauryas and the Śuṅga Cultural Phase up to the beginning of baked brick constructions about the end of the 2nd century BC, i. e. the time of the Mitras of Mathura. On top of the Mitra levels (27–25) followed the remains of the Kṣatrapas (Levels 24–23) and Kuṣāṇas (Levels 22–16). From Level 27 to 16 the unearthed structures represented each time a part of a densely built-up area of habitation. With Level 15 the situation changed considerably. Although the structural remains of Level 15 were, in their layout, clearly connected with those of Level 16, it became evident that now the lowest level of the disturbed part of the citadel was in sight or, seen the other way round, that in Level 16 for the first time a closely built-up area of habitation was found preserved. Consequently, the richer lower levels with all their wealth of remains and finds occupy much more space in this report. Nevertheless, the upper Levels 15 to 1 could, though with difficulties, be assigned to distinct periods, as Gupta and Post-Gupta Levels, Medieval Levels, and Late Fortress Levels. The results of the work in the just portrayed main excavation area form Part I of this report, consisting firstly of a technical section dealing with the architectural details of the different levels, and secondly, of a descriptive study of the finds.

Part II records the surprising discovery of a temple area, situated ca 400 metres north of the main excavation zone, where the foundation walls of an apsidal sanctuary have been excavated, its first phase dating from the beginning of the first century BC, the second one, being erected partly upon the walls of the first, belonged to the early Kuṣāṇa period about two centuries later. This second temple served as a sanctuary for the Nāga cult the existence of which was known for Mathura from inscriptions only. Remains of a carved stone railing and of its southern gate, preserving a number of magnificent sculptures, were the most conspicuous finds in the temple area.

The State Department of Cultural Affairs of Uttar Pradesh as well as the Director Generals of the Archaeological Survey of India readily gave permission for the excavations. I would like to take the opportunity to thank all the Indian officers occupied with the matter, and to express my deeply felt gratitude to the then Director Generals of the Survey, the late Mr. A. Ghosh, Professor B. B. Lal, Messrs. M. N. Deshpande and B. K. Thapar, the latter having been associated closely with our work from the very beginning.

The excavations were sponsored by two German institutions, the Deutsche Forschungsgemeinschaft (German Research Society) and the Stiftung Preußischer Kulturbesitz (Prussian Cultural Trust). Their help was simply vital. My thanks are also due to the Embassy of the Federal Republic of Germany in New Delhi, especially to the members of the Cultural Department, Mrs. M. Duckwitz and Mr. A. Würfel, who made the excavations a part of their own work. With the help of scholarships, granted by the Deutscher Akademischer Austauschdienst (German Academic Exchange Service), one or two students of Indian art and archaeology were able to join each excavation campaign.

The most essential and practical help has been extended to us by the Curators resp. Directors of the Government Museum, Mathura, and its staff members. Dr. N. P. Joshi, the then chief of the museum, not only helped the author in the discovery of the site but took care of all the mutual problems arising naturally during such a venture in an exemplary way. The common keen interest in ancient Mathura made the cooperation most profitable for both sides. When Dr. R. C. Sharma took the chair in the museum in 1969 I experienced the same friendly support and an equal interest in the problems of Mathura archaeology and art. I have no words to express my gratitude to both, Dr. Joshi and Dr. Sharma, for all the help and cooperation they extended to us. I have benefited greatly from the discussions with them as also with colleagues visiting Sonkh during the time of excavations, especially with Messrs. R. C. Agrawala, P. L. Gupta, S. P. Gupta and Dr. S. C. Kala. I wish to express my thanks also to the late Prof. H. D. Sankalia and Prof. S. B. Deo for the encouraging interest they have always shown in our work. Similarly, I am obliged to Mr. M. C. Joshi, now Director General of the Archaeological Survey, who in 1973 started excavations in Mathura City, for the fruitful exchange of opinions. I am indebted greatly to Dr. A. K. Srivastava, then Numismatic officer at the State Museum, Lucknow, for the identification of coins found in the excavation, and to Dr. O. P. Agrawala, the then Chief Chemical Officer of the National Museum, New Delhi, who kindly treated the two bronze images unearthed in the Kuṣāṇa levels. Concerning the identification of coins, I would like to acknowledge with thanks the contributions of Dr. P. L. Gupta on the hoard of punch-marked copper coins, and of Prof. Dr. R. Göbl of Vienna University who took care of the Kuṣāṇa copper coins (see IV. K. COINS). The extraordinary Kuṣāṇa coin no. 6 in Part II inspired not only Dr. P. L. Gupta but also Prof. B. N. Mukherjee to publish their valuable opinion on it (see Part II, V. G.).

The German excavation architects and field-supervisors were Prof. Dr. A. v. Müller (1966–67), Mr. W. K. Hecker and Mrs. G. Hecker (1967–70), and Dr. R. Weber (1970–74). They were responsible for the digging procedure and the drawing of the plans and sections. At times, they were assisted herein by Messrs. W. Brettschneider, G. Grimmenstein, C. Stollfuß and M. Zimmermann. In the second campaign Dipl. Ing. W. Fauer carried out a topographic survey in order to get a contour plan of the mound of Sonkh. During the first five campaigns Dr. G. Kreisel, at that time a student of Indian art and archaeology, was taking part as an assistant of versatile abilities. I wish to express my gratitude to him for his untiring readiness wherever help was needed.

The photographs accompanying the report have been taken by Messrs. W. Giesenhagen and W. Moisa of the Museum of Indian Art, Berlin. Both were providing first-aid also to the metallic objects and other antiquities in the field. Mr. Moisa, a perfect man in all situations, was helpful even through all the time of my writing this report. The drawings of pottery and other small finds have been produced by Messrs. K. Hennies, H.-J. Paech and J. Klein.

The publication of this report is, in distinct parts, due to the cooperation I have received from Dr. Rolf Weber and Mr. Hans-Jürgen Paech. Dr. Weber contributed to the architectural section (I.D., II.A–H) and helped the author by critically reading part of the manuscript as well as by valuable suggestions during the accomplishment of the report. Mr. Paech, technical assistant in the Museum of Indian Art, contributed the sections on metal objects, beads and pottery along with the pottery drawings. To both of them the author expresses his deep-felt thanks.

The upper levels, i.e. Levels 16 to 1, had originally been treated by Mr. and Mrs. Hecker in a comprehensive German manuscript. Due to the growth and importance of the material found in the lower levels the author had to decide to write a shorter report on Levels 16 to 1. Nevertheless, parts of the summaries in Hecker's unpublished manuscript have been helpful for the purpose at hand and are properly quoted in the respective places.

The photographs of the full-sized plates, especially those of the coins, have been laboriously reproduced in distinct sizes by Mrs. I. Papadopoulos, the photographer of the Museum. I am most thankful to her for all the pains she has taken. Very helpful was the systematic order of the huge triple card index of finds so meticulously organized by Dr. W. Lobo of the Museum of Indian Art. Caused by the growing expenses for the publication, only reduced versions of the plans of the levels could be published in the report. They were redrawn from reproductions of the original drawings (1:50) by Mrs. M. A. K. Kitt, who finalized also figs. 1, 6 and 46 and sketched the hump types of the terracotta bull figurines.

During the long and numerous campaigns the office in Berlin was administered in an exemplary way by the colleagues who had to stay at home. I wish to thank especially Dr. V. Moeller and Mrs. H. Kunz, who made it possible for us to take leave from the daily work for such a long time.

I owe the deepest and foremost debt to Prof. Dr. (Mrs.) M. Yaldiz, the Director of the Museum of Indian Art, Berlin, for her permission to use all the sources and facilities of the museum including the help of staff members. As chairwoman of the council of the Stiftung Ernst Waldschmidt she is also the editor of this volume. I am also very much obliged to the members of the official bodies of the Stiftung Ernst Waldschmidt for including this work in the monograph series and for financing the print of the book.

I am much beholden to Dr. R. Weber, Mr. H.-J. Paech, Dr. L. Sander and the late Mr. S. Sinha for going through parts of the manuscript and for reading the proofs. Not the least I am indebted to Mr. O. Holy, Reiter-Druck Berlin, for his untiring and friendly cooperation and careful printing.

In the end, the author cannot but thank his wife, Rosemarie Härtel, for her help as well as for her understanding and patience during years of work at home.

Finally I crave indulgence of the readers for the remaining misprints and other blemishes due to the "foreign" English that have crept into the report.

H. Härtel

PART I

THE EXCAVATION IN THE CITADEL AREA

I. INTRODUCTION

A. THE PROBLEM AND THE APPROACH

In view of the cultural importance of the ancient State and City of Mathura known to us from literary sources as well as from the vast material of stone sculptures, architectural pieces, terracotta figurines and objects, inscriptions, coins etc., we have to face that the archaeological research in this region lags far behind. The images handed down to us tell of a rich religious life in the early historical period in which Buddhism, Jainism, Hinduism and Folkcults competed with each other. But there are no structural remains extent enough for a reassessment of the antiquity of Mathura and the nature of early historical settlements in its environments. This disappointing situation is, naturally, not to be overcome by a few new small-scale excavations, but only a more purposeful attempt in a larger project might help to throw some more light on the dark period of early Mathura.

With these ideas in mind we decided to undertake something in this direction. Representing the Indian Art and Archaeology research Team of the Museum für Indische Kunst in Berlin we approached as early as 1964 the then Director General of the Archaeological Survey of India, Sri A. Ghosh, for the permission to carry out excavations in Mathura District. In the hope of a decision in favour of our application mentioning the exact site the realization of the idea seemed to be within reach.

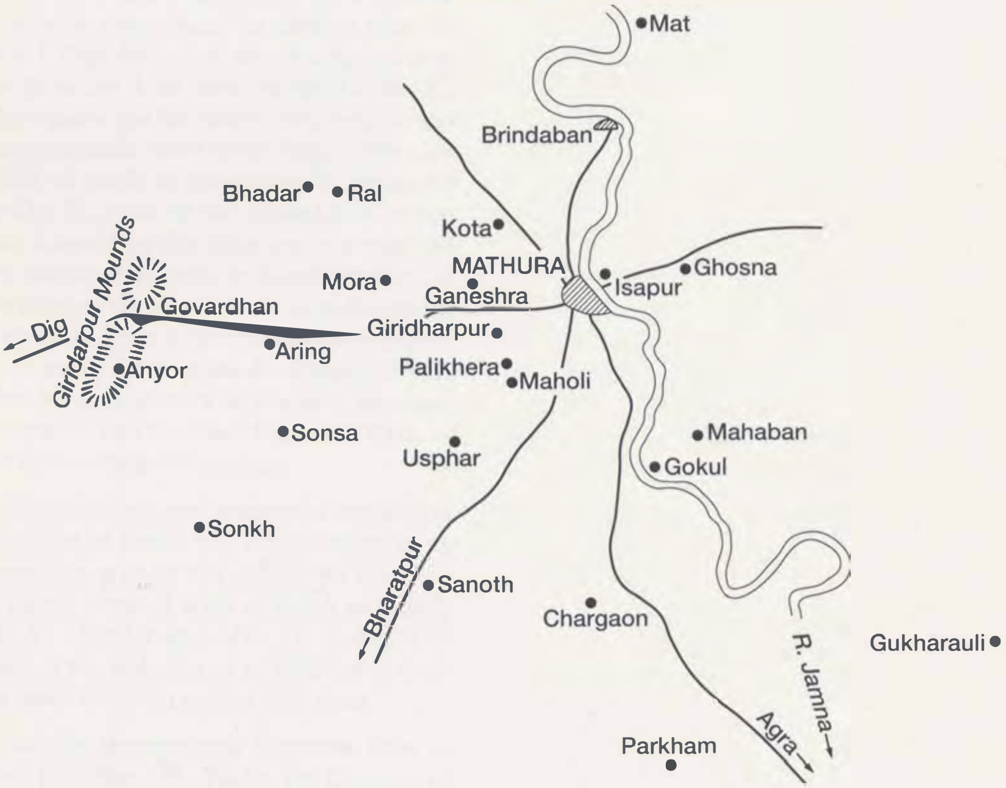
The first question was which of the numerous sites surrounding the city should be selected for excavation. As it was our main interest to find some larger areas of architectural structures of the early period of the old Mathura State, it seemed to be advisable to look for comparably undisturbed mounds in the surroundings instead of those in the city itself (Fig. 1). And among all the promising places visited and discussed in the company of Dr. N. P. Joshi, the then Curator of the Govt. Museum Mathura, the vast artificial plateau within the fields of Sonkh, fourteen miles as the crow flies from Mathura and some eight miles south of the holy Govardhan, attracted the author as being the most suitable object for excavation (Fig. 2).

In his "District Memoir" of Mathura (3rd ed. 1883: p. 383) F. S. Growse remarked: "This (township of Sonkh) lies immediately under the Khera or site of the old fort, of which some crumbling walls and bastions still remain. It was built by a Jāṭ named Hati Singh, of the time of Sūraj Mall of Bharatpur, or Jawāhir Singh; *but the khera itself must be many hundred of years older*". Exploring the top of the mound, Growse's opinion could easily be confirmed by a large number of surface finds of sherds of the Painted Grey Ware and later potteries, of Śuṅga, Mitra and Kuṣāṇa terracotta objects and small fragments of Kuṣāṇa stone sculptures. As realized later, these items were thrown up to the highest point when a large and deep moat was dug in the 18th century. Thus a collection of the contents of the site was presented to us in a most unusual way indicating that an excavation at this place was bound to be successful.

Although the contours of the mound clearly betray a citadel upon the wide plateau, the expectations were, for a short time, mislead by the recollection of an important sculpture *said* to come from Sonkh, i.e. the fragment of a Cakravartin Buddha recording in its inscription the latest known date of Kaniṣka I, the year 23 (Lüders 1961: §136). As during eight campaigns of excavations nothing Buddhistic has been found in this site, we doubt if the, in any case uncertain, provenience "Sonkh" given for that sculpture is correct.

B. REMARKS ON THE NAME AND THE HISTORY OF SONKH

The name SONKH is, in all probability, younger than the ancient settlement on this place. There is no seal or inscription mentioning the old name as, e.g., is the case with the neighbouring village of Aring obviously being so fortunate to have preserved its original designation. For Sonkh, we do not have any source to bring light into its earliest history except archaeological excavation. Even for the later periods we are more or less dependent on hearsay. It was, nevertheless, interesting to observe that the "local tradition" on which F. S. Growse based his notes on Sonkh is still alive with the younger people in the town. Among the more ignorant villagers the absurd story that Sonkh is the place where the demon Śaṅkhāsura lived is as current at present as in Growse's time. But there are still people who retain scraps of information on Sonkh which are worth to be taken as serious. According to Mr. Biri Singh, a teacher in the I. A. College in Sonkh, this place was called Tomargarh in the 8th century AD but named Sonkh in the 11th century after Sonak Pāl, a Tomar Thākur from Delhi. For F. S. Growse this Sonak Pāl was a Sohan Pāl about whom he says (p. 345): "Sonkh, Sonsa, and Sonoth, all three places in the immediate neighbourhood, would also seem to be named after him and to prove that he was an historical personage of at least considerable local importance". Growse has probably heard nothing of a Tomargarh and dates his Sohan Pāl obviously in the 8th century when he, elsewhere in his book (pp. 382–83), says "according to more genuine local tradition,



1 Mathura and surroundings

2 General view of the mound, looking south

(Sonkh) was first founded in the time of Anaṅga Pāl, the rebuilder of Delhi, probably by the same Tomar chief who has left other traces of his name at Son, Sonsa and Sonoth". We are, regrettably, not in a position to clear the contradictions on these informations about the history of the place of Sonkh in this period but would like to point out that the Tomar dynasty knows also an Anaṅga Pāl II (AD 1049–1079) and Anaṅga Pāl III (AD 1128–1149).

Other records concern the more recent history of Sonkh, the period of the Jāṭs. According to Growse the "old fort" was, as already quoted, built by a Jāṭ named Hati Singh, of the time of Sūraj Mall of Bharatpur, or Jawāhir Singh. We have reason to assume that the Jāṭ mud fortress of Sonkh was built at the same time as the rubble-and-mud citadel of Dig under Badan Singh (1722–56) by his son, the then prince regent Sūraj Mall. Sonkh is also mentioned as one of the four strongholds of the Jāṭs in the reign of Aurangzeb (Qanungo 1925: p. 341). This fortress of Sonkh finally stood in the centre of fierce battles fought between the Marāṭhās, Rājputs, Jāṭs and the Mughals (Qanungo 1925: pp. 231 ff.; J. N. Chaudhuri 1977: p. 160) which brought about its end in ca 1775.

These are all informations available about Sonkh. Would we know the ancient name of the locality the situation might be different. But thus it needed the excavations to prove that this place had a hoary past, reaching back far into the first millennium BC.

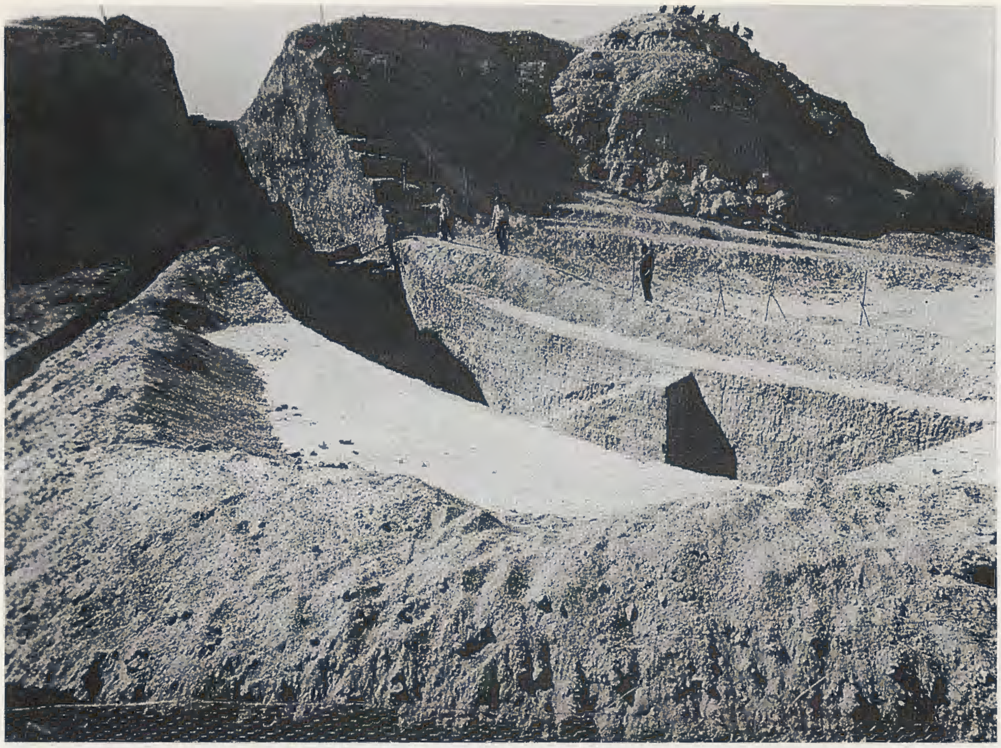
C. THE SITE AND THE EXCAVATION PROCEDURE

The site of Sonkh, 27°24′ North Latitude and 77°30′ East Longitude, is located in Mathura District in Uttar Pradesh. To visit the place from Mathura one has to take the more direct road to Kumbher (25 km) or the detour via Aring and Govardhan (32 km).

As one approaches Sonkh the mound would be seen jutting out against the horizon from far. The site consists of a plateau which originally was of the size of at least 200000 sqm, but is now diminished to a large extent. However, an area of 320 × 280 m, i.e. about 90000 sqm, of the old mound still exists surrounded by fields in the west, north and east. To the south-west the plateau ends rather abruptly on the main road from Govardhan to Bharatpur. South of this road, the wide-spread village of Sonkh, population about 6000, extends on the spur of the ancient mound.

Farther north and north-east of the plateau the ground is rather fractured by the clearing away of a tremendous amount of soil for the construction of the canal running in a bow from north to east along the outskirts of the plane. This canal is in all probability following the line of an old river-bed bounding the site at least in the early historical period as suggested by the structural remains on the small area of ancient ground preserved within the fields like an island (see Part II, Introduction).

In the south the plateau is dominated by an elevation rising ca seven to eight metres above the plane area of the site representing in its upper levels generations of fortifi-



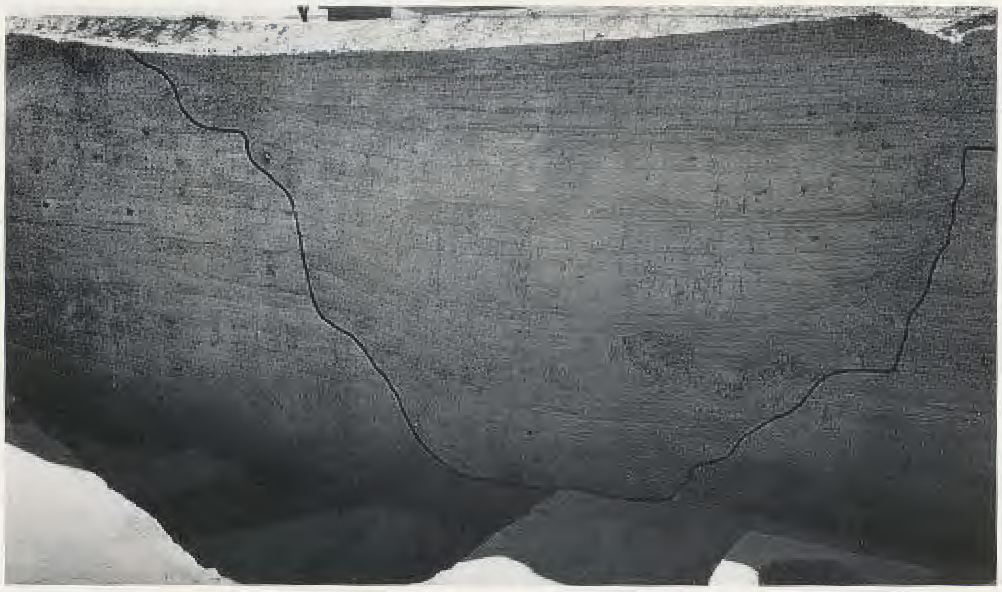
3 Trench 1, looking north

cations built one above the other. This citadel construction covered by hard weatherworn mud measures ca 105 × 90 m and shows at its corners the contours of towers. Into the eastern slope, near to the south-east tower, a large breach is made, washed out by the rains and used nowadays as a path up to the top of the mound. This breach is most probably connected with the construction of a new entrance gate in the last phase of the citadel.

Of the four sloping sides of the citadel elevation the northern fringe appeared to be the least disturbed one. To get an idea of the successive levels covered by the mound, this was the most promising place to make a vertical cut, touching the highest point of the citadel and leading down to the natural soil in a terrace-like partitioned trench. Thus a 36 × 5 m long trench, i.e. Trench 1, was laid in the area 2 V/Ca till 3 I/Ca, penetrating the citadel elevation in a depth of only 10 m, but cutting 26 m into the plane towards north (Fig. 3). The upper part of this Trench 1 reaching into the slope of the elevation revealed fragmentary walls of structures built one above the other dating from the 19th century on top down to the late Kuṣāṇa structures at the foot of the mound, i.e. in the height of the surrounding plateau.

The longer part of the trench laid into the plane ground towards north was expected to show the continuation of settlements down to the natural soil. In the beginning this seemed to be a vain hope because for a long time nothing but mud, brickbats and stones without any structural connection came up. Only when a sufficient depth was reached, the riddle could be solved: Along the foot of the citadel elevation a huge moat had been dug in the period of the last fortification (Level 4) throwing the old soil with all its contents up to the rampart and the highest point of the mound (Fig. 4). Therefore this rampart and the finds in it would be a constant source of confusion when excavating the levels in the plane unless we were carefully paying special attention to the respective areas. Fortunately, the trench was long enough to comprise the whole width of the moat and to show the cultural sequence of the levels on the sloping sides of it. On its surface the moat measured 13.80 m, near to the ground, i.e. close to the natural soil, it tapered down to a width of 3.00 m. The preserved complexes of cultural levels to its sides brought us down to the Painted Grey and Black and Red Wares resting on the virgin soil.

The result of this exploration led to the decision to continue the work by horizontal digging in the north-eastern quadrant of the mound at the side of Trench 1. It needed altogether eight campaigns of terracewise excavations in this limited area to unearth the ancient witnesses of this place as reported and discussed in the stratigraphic chapter below (Fig. 5).



4 Profile of moat of Level 4 crossing Trench 1

D. SURVEY OF THE AREA AND PREPARATIONS FOR EXCAVATION

As it was found out by the ground-research survey and the trial trench of the first campaign (1966/67) that the mound of Sonkh represented a multi-layered site worth to be excavated on a larger scale, preparations for a horizontal digging had to be made.

A topographic survey was started by a surveyor (Dipl. Ing. Walter Fauer, Berlin) to get a contour plan of the mound of Sonkh and the surrounding area resulting in a plan drawn in the scale 1:1000 (Fig. 6).

The contour lines are given at 1.0 m intervals, the 10.0 m lines given in thicker, the 5.0 m ones in dotted lines.

The datum point as main site control point was set arbitrarily due to the lack of a point of known elevation above mean sea level.

The highest point reached in the citadel elevation is about 32.30 m, the surrounding planes at about 23.00–19.00 m, the lowest level reached in course of excavation about 12.00 m.

The surveyed area extends from a section of the Govardhan-Bharatpur road south of the mound about 700 m towards north and, starting about 100 m west of the mound, for a distance of about 600 m to the east. To the north-east the boundary of the surveyed area was formed by the modern canal. Thus a plan was prepared including the mound of Sonkh, the small island of the Cāmuṇḍā temple north to the main excavation area and the surrounding region so far important.

For the purpose of excavation an overall grid system was designed for the whole area, basis of division being 100 m squares. Numerous cemented bench marks as site control points were set in the area of excavation, their position coinciding with the points of intersection of the 100 m squares, marked by numbered circles and giving the respective height at the above datum point. The orientation of the survey map and the plans of the excavation was agreed upon as true north being at the top of the plans. The northern direction has been fixed by measuring the pole star, making allowance for the deviation from the geographic North pole.

The 100 m squares were marked, starting at the south-western corner, by numerals 1–8 in south-north direction and by letters A–G in the west-east direction. For ease of recording within these basic squares a grid system was devised by dividing the 100 m squares in 20 m squares, carrying each in south-north direction the Roman numerals I–V, in west-east direction the small letters a–e, e.g. giving the designation of the first 20 m square as 1 I/Aa and so on.

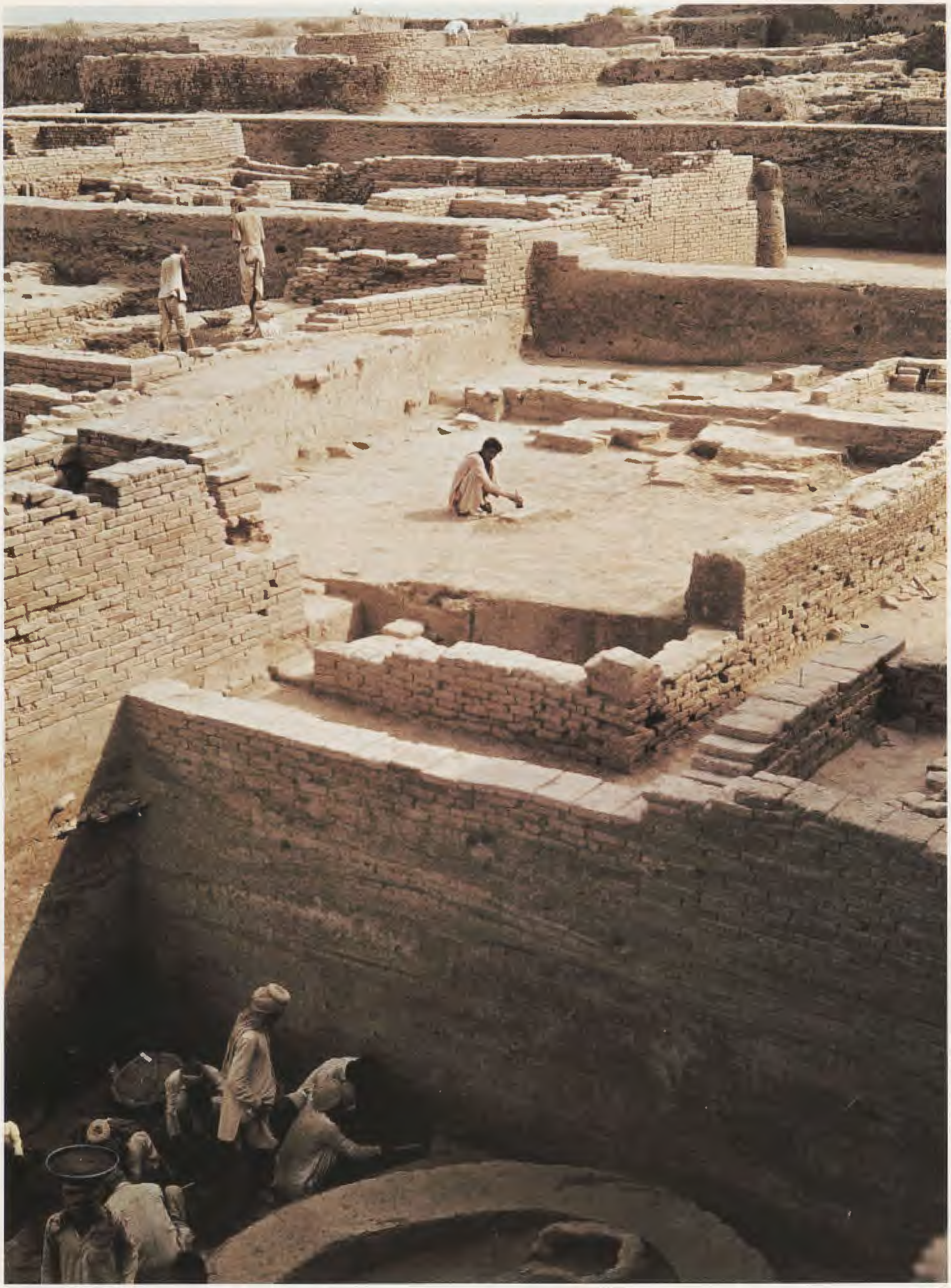
So that all the data could be easily recorded, and all the finds unearthed in their respective area were correctly labelled, measurement started always at the south-western corner of a 20 m square or sub-square in northern resp. eastern direction. A measured point will thus have e.g. the data 2 V 12.50 m / Ca 9.20 m, accompanied by its height according to the bench marks. As the 20 m squares were still too large for actual excavation work 10 m squares were chosen as the working unit. The ground of the excavation area was pegged out, the nodal points of the 20 m and 10 m squares respectively marked by wooden pegs, diagonally posed, giving the designation of the square under excavation.

For the measurement of the excavated structures, and to establish the exact position of major excavated objects, the method of geometrical triangulation was used, height data were measured as far as possible by use of theodolite and levelling rod.

The width of the vertical working balks, taken down after recording the results of the excavation work, was chosen to be 1.0 m, giving as inner field of excavation an area of 9.0 × 9.0 m. For the study of the sequence of levels the inner eastern and southern sides of the working squares were recorded. Apart from detail drawings, the scale of plans and sections is 1:50 uniformly.

The north-eastern corner of the citadel elevation was chosen as the main excavation area. The western profile of Trench 1 and its prolongation towards south-west, running in a deviation of 17 degrees to the south-north direction, was taken as the western boundary of the selected area. The southern border was chosen, starting approximately in the centre of the citadel, running south-east in a deviation of 21 degrees to the west-east direction. The western and southern border lines of the excavation area are meeting thus in an angle of 94 degrees.

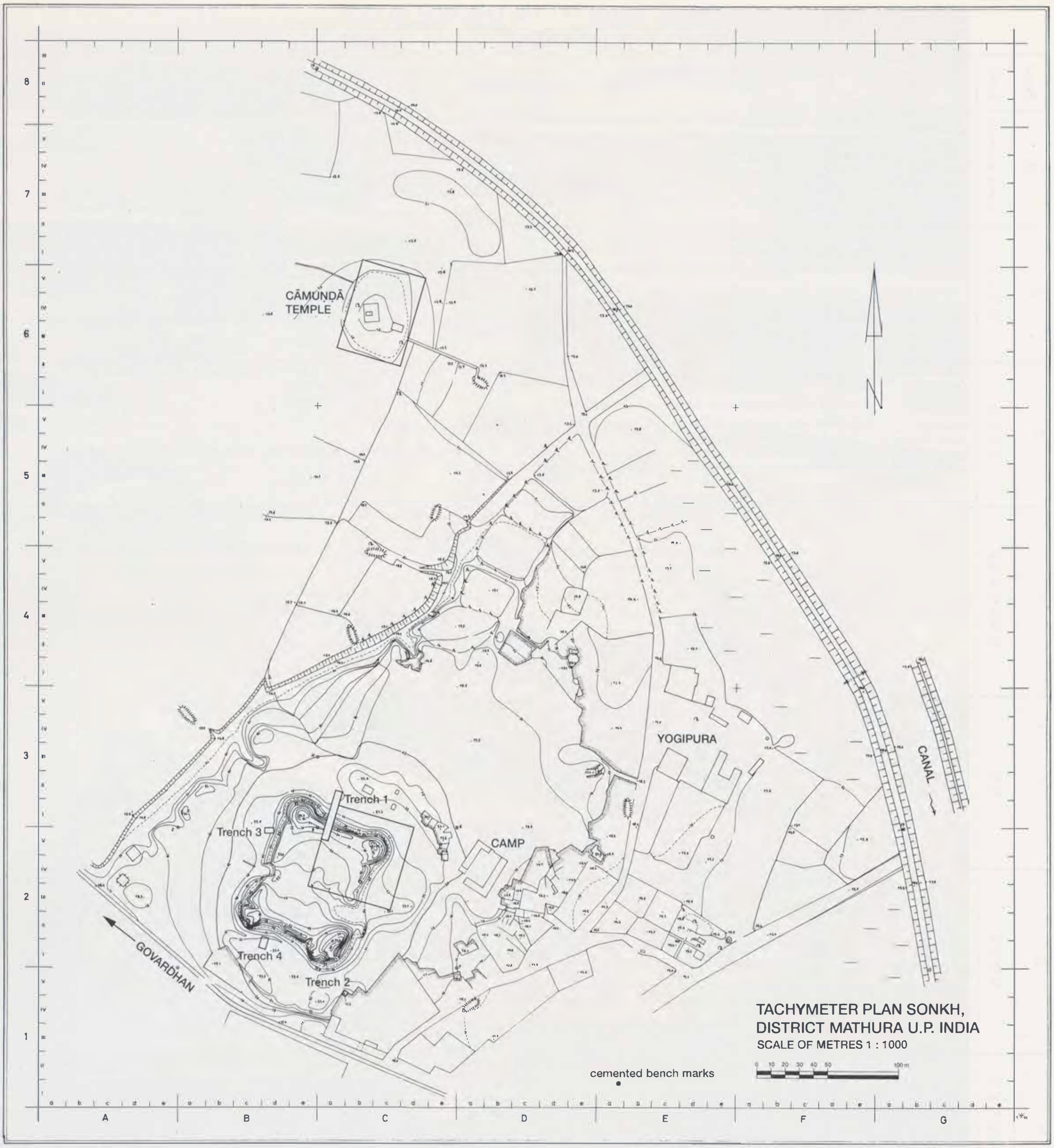
In the beginning the total area under excavation was about 50 × 48 m, i.e. about 2400 square metre, reaching in its larger extension in course of excavation an area of about 4.800 square metres, not including the site of the Apsidal Temple no. 2 (see Part II).



5 Terraces of excavation, Levels 36 to 16

E. SUMMARY OF THE RESULTS

Period	Level	Sub-Periods	Cultural Equipment
VIII	1 2 3 4 5 6 7	Late Fortress Levels Moghuls to Jāts	Black-on-red painted pottery. Moulded grey and red jars and bottles with relief décor in Levels 8 to 6. Appearance of hookah. Successiv fortresses in Levels 7 to 5. Mud fortifications and large moat in Level 4. Arrow-heads, clamps, cannon balls of iron; rings of copper. Terracotta male figures and riders. Hollow animal figurines. Terracotta objects: spindle-whorls, balls, toy-guns. Satti-satta stone reliefs; large stone bowls. Beads of shell only.
VII	8 9 10 11	Medieval Levels	Quantity of pottery finds considerably reduced. Types of Period VI continuing. Décor mainly of black painted stripes, swans and peacocks. Cone lid with knob replaces bell-shaped and bowl lid. Appearance of thin grey ware, white-slipped, incised and painted. Alignment of buildings from now diagonally to the cardinal directions. Caravanserai in Level 11. Levels 10 to 8 developing residential areas again. In Level 8 four coins of Sher Shah Suri. Rods, nails, chain of iron; plate of copper; ring of brass. Terracotta female figures and fragments of satti-satta plaques. Few animal figurines. Terracotta discs, spindle-whorls, game-pieces, balls. Last specimens of grey stone plaques depicting deities in Level 11. Long pestle, hammer stone. Beads as in VI.
VI	12 13 14 15	Gupta to Early Medieval	Red, mostly red-slipped ware, delicately thrown, smooth surface, distinct black horizontal stripes. Later on black painted swans and floral pattern. Moulded bowls with relief ornaments; goblet with moulded bowl and stem. Bottles with sprinkler necks and spouts. From Level 15 upwards strongly disturbed building area. Arow-heads, rods, tubes pincers, chisel, nails, hooks, chains of iron. Dish, bottles, wire of copper and brass. Terracotta female figures; fragment of a larger relief with Makara. Horse and humped bull most favourite terracotta animals. Votive tank and water jug. Terracotta objects: wheels, discs, spindle-whorls, dabbers, game pieces, balls. Grey stone plaques depicting deities; trays. Rotary quern of stone. Beads of usual materials except copper. No incised types.
V	16 17 18 19 20 21 22	Kuṣāṇas	Red ware with the characteristic Kuṣāṇa stamping of storage vessels, jars etc. with symbolic, floral and geometric ornaments. Moulded small bowl. Spouted water jars. Seven levels showing more or less densely built up area of houses. Occasionally working area without building. Apsidal Temple no. 1 in the habitation area. Coins of Wima Kadphises, Kaniṣka I, Huviṣka, Vāsudeva and successors. Bronze figures of Skanda and a deitie couple. Arrow-heads, spear-heads, knifes, sickles, clamps, rattle bell of iron; cart, antimony rods, bangles, rings of copper. Terracotta human figurines, depiction of gods and goddesses. Animal figurines, mostly humped bulls. Inscribed seals; coin moulds; pottery stamps. Votive tanks. Usual terracotta objects. Stone sculptures and reliefs. Trays and caskets. Inscribed stone fragments. Mill stones as before. Bone styli; shell bangles. Beads of all materials and types, including such of lapis lazuli and incised and etched types.
IV	23 24	Kṣatrapas & Rāmadatta	Red ware, characterized by definite differences in the shapes. Globular water jar, small goblet, beaker. In the end of this period the fashion of stamping the vessels with symbols begins. Houses now built in sections and protected at street-corners with large stone blocks. House with bathroom and toilet. No roof-tiles anymore. Coins of Hāgāmaṣa, Rājuvula, Śoḍāsa, Rāmadatta. Arrow-heads, spear-heads, knifes, chains, rods, clamps, spoons, ladle of iron. Goblet with bowls of copper. Terracotta human figurines, Kṣatrapa type of mother goddess. Humped bull most favourite animal. Votive tank with seated mother goddess figures. Terracotta objects as before. Inscribed seals. Stone objects: mortars, ring-stones, dabbers, pestles, Caskets. Inscribed fragments. Bone styli; shell bangles. Beads of all materials except lapis lazuli. No incised and etched types.
III	25 26 27 28	Mitras of Mathura	Red Ware types continuing. New shapes, esp. ovoidal storage jars with appliqué cordons and symbols (svastika, nandyāvarta). Handles in shape of monkeys. Beginning of baked brick construction in Mitra Level 27. Regular town planning. Houses constructed by grouping of rooms around an inner courtyard. Terracotta ring-wells in private houses. Gable roofs with roof-tiles and pinnacles. Inscribed copper coins of Gomitra, Sūryamitra, Brahmamitra, Viṣṇumitra. New: spear-head, sickle, brand-iron, ring of iron; hook, toggle, ring, antimony rod and wheel of copper; bracelet, bangle of brass. Terracotta human plaques, animal figurines (mainly elephant and horse). Square and round votive tanks to be filled with water. In addition to Period II terracotta toy-carts, dabbers, rattles, amulet and pendants. Inscribed seals. Stone objects: rectangular quern plates, pestles, dabbers, discs, balls. Stone caskets. Bone styli, shell bangles. Beads of all types and material except lapis lazuli. No etched and incised beads. First appearance of faience.
II	29 30 31 32 33 34 35 36	Śuṅga Cultural Phase Maurya Pre- and Early Maurya	Northern Black Polished Ware; coarsegrey ware; black-slipped grey ware; ordinary red ware. Fashion ofterracotta heads on shoulder of vessels. Animal-shaped vessels. Mud wall structures in Levels 36–30. Beginning of mud-brick construction in Level 29. Fragment of mosaic. Silver and copper punch-marked coins; uniscribed cast and die-struck coins. Arrow-heads, rods, nails of iron; bracelet of copper. Terracotta human figurines, mostly black-slipped, in later phase of period in shape of reddish plaques. Terracotta animal figurines, elephant most favourite. Fragments of round votive tanks. Terracotta wheels, discs, spindle-whorls, skin-rubbers, reels, game pieces, plain and decorated balls, bangles. Jewelry mould. Stone quern tables, balls. Anthropomorphic bone figure. Beads of all materials except lapis lazuli, faience, blue, black and yellow glass and gold-foil.
I	37 38 39 40	Painted Grey Ware Black-and-Red Ware	Painted Grey Ware and, to a lesser degree, Black and Red Ware. Black-slipped Ware. Ordinary red and red-slipped ware. Vessels partly decorated with incised, impressed or applied paterns. At theend of the period coarse grey ware. No mud or mud-brick walls but post-holes and reed impressions. Brick-like pieces of mud from fireplaces. Two ditches with small rampart in between, perhaps part of the northern enclosure of the habitated area. Iron arrow-heads, blade of an adze or axe. Fragments of terracotta animal figures; discs, plain and decorated balls, bangles. Beads of carnelian, agate and copper. Hammer stone.
			Natural Soil


CĀMUṆḌĀ TEMPLE
YOGIPURA
CANAL
CAMP
Trench 1
Trench 3
Trench 4
Trench 2
GOVARDHAN
N
TACHYMETER PLAN SONKH,
DISTRICT MATHURA U.P. INDIA
SCALE OF METRES 1 : 1000
cemented bench marks
0 10 20 30 40 50 100 m
1
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A
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G

6 Tachymeter plan of the mound of Sonkh

II. GENERAL SITUATION OF THE TRENCHES

In course of the eight excavation campaigns the stratification of the earlier phases of habitation was examined in trial trenches in several places within the excavation area and its surroundings. The main attention was directed to the Painted Grey Ware levels as well as to the formation of archaeological remains upon and above it, beginning with the Early Maurya level 36 and reaching upto Level 27, the structures of which were exposed at first in a larger extent. The position of the trenches and their extension are documented in the surveyor's plan (Fig. 6).

The extension of Trench 1 and the layout of the trenches within the later excavation area, squares 2 IV/Be and 2 IV/Cc, during the campaigns 5 to 8 had to take in account the already exposed structures of the Kuṣāṇa period in 2 IV as well as those of the Mitra level 27 in 2 V.

Trench 2 was dug in the precincts of a cut-off part to the south of the citadel. Trenches 3 and 4 are situated at the western and southern slope of the ramparts of the citadel elevation. These trenches provided sufficient information on the extension of the levels and the structural and chronological succession of the early epochs of habitation below the well exposed Mitra level 27. The area covered, i.e. enclosed by the trenches has an extension of 150 m in the north-south direction and 90 m from west to east.

In all the trenches natural soil was reached underneath the lowest level of PGW. To be on the safe side, the soil was examined in parts down to a depth of 3.0 metres. However, no traces of older habitation phases could be made out.

In some places a sharp line was marking itself between the ochre to reddish-yellow, slightly loamy, sandy ground of the PGW levels and the more whitish-light grey to yellowish sand of the natural soil which is mixed with mica and kankar; but in parts a gradual change could be ascertained as well.

A. THE TIME OF THE PAINTED GREY WARE

1. The Trench 1 and its Extension

In the first excavation campaign of 1966/67 a trench of 36.0 by 5.0 metres was laid in the squares 2 V/Ca to 3 II/Ca (Härtel 1967 and 1968) cutting down through the northern slope of the citadel elevation (Fig. 3). In the northern part of Trench 1 the natural soil was reached on an area of ca 75 sqm. The ceramic finds of the Painted Grey Ware period, the levels of which lay directly on the natural soil, were surprisingly extensive inspite of the rather limited dimension of the cut. This has to be attributed for the most part to the exposure of a ditch belonging to this time, the course of which is crossing the trench (Fig. 4). To corroborate the information so far gained and to integrate the trench into the grid system of the excavation, an extension to ca 240 sqm was started in the campaign 1970/71 (Härtel 1972).

The average thickness of the culture levels of the PGW period was 1.0 m in the region of Trench 1. The upper edge of the natural soil rose from ca 14.25 m in the northern to ca 14.50 m in the southern part. The upper limit of the PGW levels was reached here, in the undisturbed area, at ca 15.50 m. Within this stratum of rather uniform consistency (see below) could be ascertained the remains of diverse superimposed levels of habitation partly coinciding with thicker layers of sherds. Together with the typical PGW, which gave the name to this period, sherds of Black-and-Red Ware (BRW), Coarse Grey Ware as well as partially decorated Red Ware were found in all spheres of the PGW levels.

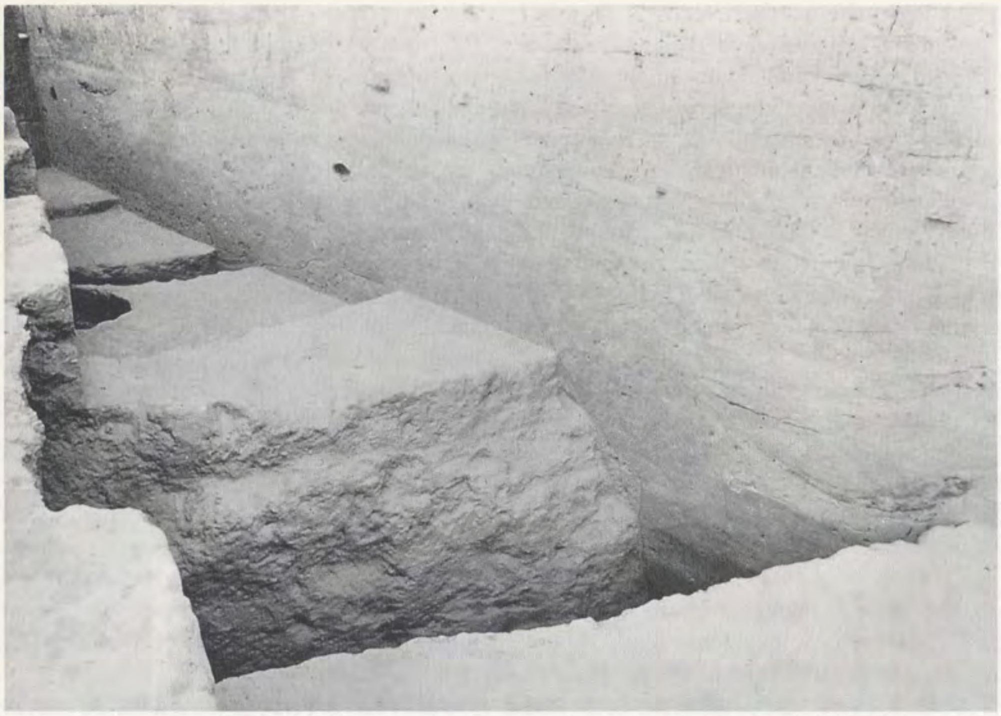
Level 40, Phase 1 and 2

Running parallel, two ditches of different width cut through the excavation area from WNW to ESE in the northern part of Trench 1 (Fig. 7). They were sunk directly into the natural soil in the first dwelling phase of the mound of Sonkh. The bigger ditch, partly more than 2.75m wide at the top, upper edge at about 14.50 m, was ca 2.20 m deep ending on a level of ca 12.30 m. The bottom of the smaller ditch, ca 0.70 m wide, lay at 13.30 m, ca 0.80–0.90 m beneath the lower outer ground level. The average distance from the middle of one ditch to that of the other , was ca 4.50 m, whereas the overall measurement of the ditch system varied between 6.00 and 6.50 m. The ground sloped ca 0.25 m slightly from west to east in the neighbourhood of the ditches. Correspondingly the bottom of the bigger ditch inclined gradually, it lay about 0.45 m higher at the western side. However, it cannot be excluded that these differences in height appear in a small part of the ditch system only. Thus it remains doubtful whether the whole of the ditch system was laid out in the gradient or on a rather even level.

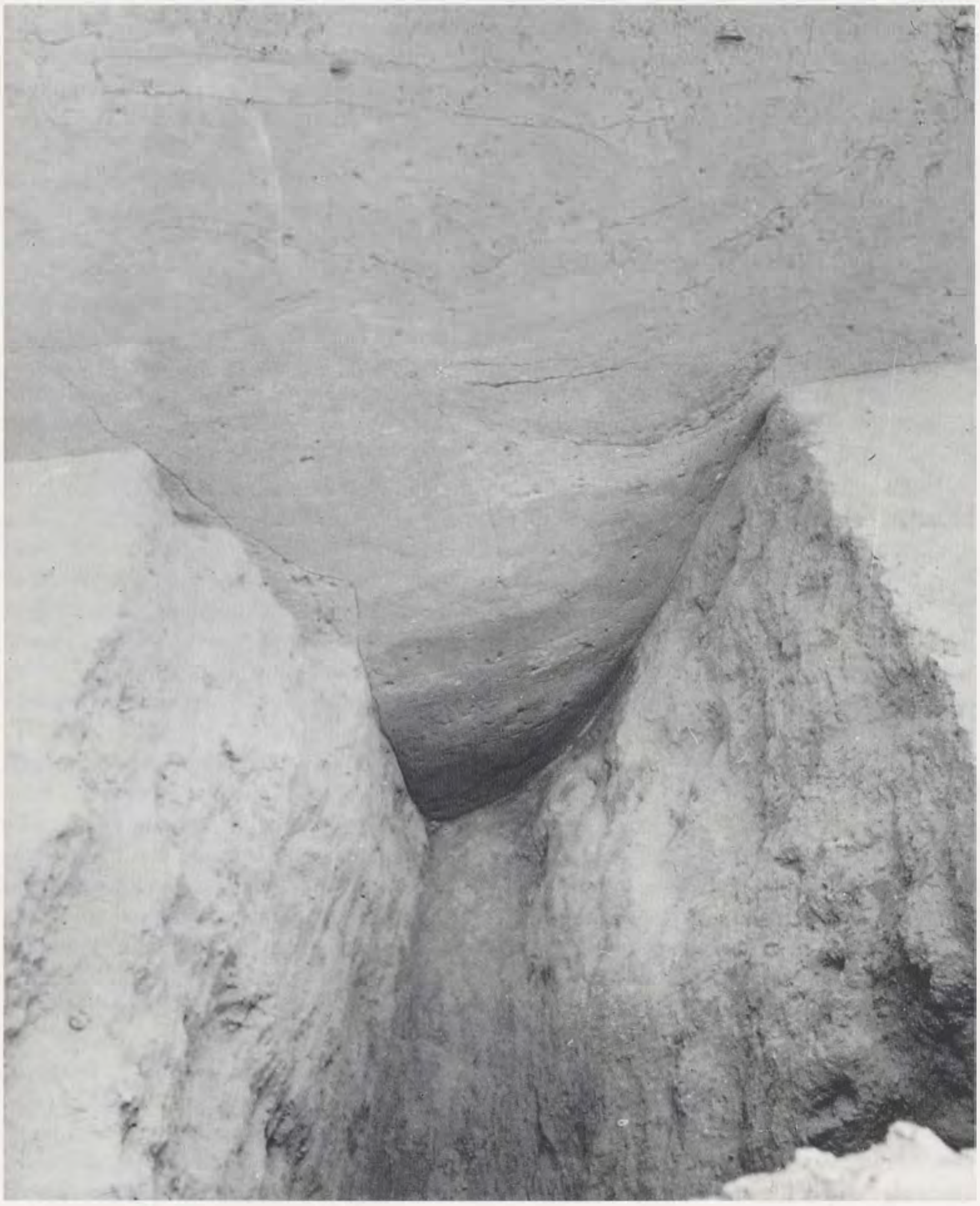
The original profile of the bigger ditch was almost trapeze-shaped, narrowing to ca 0.60 m at the bottom (Fig. 8). The width of the bottom of the smaller ditch was ca 0.40 m, the original angle of inclination of the ditch embankments lay at 70° to 80°. Yet, through erosions and partial gliding-down of the loose soil the slopes of the embankments showed rather varying angles of inclination in course of the ditch. Temporary water-bearing can be presumed on account of single firm alluvial layers, but it is rather doubtful whether the ditches have borne water constantly. On the basis of the upper alluvial layers it could be concluded that the ditches later on were flooded from the south and filled up, the surface water streaming in carrying with it the rather loose soil. The area lying between the both ditches was banked up and raised while digging the ditches, the more horizontal line now marking in the profile to be attributed to an erosion.

For this earliest habitation phase as well as for those following of the PGW period no remains whatsoever of structures of mud or mud-brick could be determined in Trench 1. Some post-holes met with in higher levels as well as remains of clay-impressions indicate the use of easily perishable building material. The significance of the ditch system and its relation to the whole habitation area was stressed by the overall situation met with, the alluvial layers of the southern larger 'inner' ditch yielding the greater number of ceramics found in theses levels. In addition to numerous sherds of PGW, BRW and ordinary Red Ware, there were found also several larger fragments of vessels and likewise 25 sherds of a bowl (POTTERY I.12) of a coloured variant of the PGW, in a height of 13.05 m. Presumably, the bowl which could be completely put together from the sherds, slipped into the at that time water-bearing ditch and broke on the bottom. A vessel of associated Red Ware, 23.0 cm high, could be recovered unbroken in the height of ca 13.30 m (POTTERY I.49). In the trench area south of the ditches likewise sherds of PGW were found in a range of 14.60 to 14.40 m, to be regarded as synchronous with the construction of the ditch system. Rather different was the situation while excavating the smaller of the two ditches and the area lying north of it. Here only single sherds were found sporadically in an average range of 14.20 to 14.40 m.

These results, in connection with the form of the ditch system, leads to the conclusion that we have to regard the ditches as lying at the periphery of the habitation, at least in the initial phase of the PGW period. Worth



7 View of the two PGW ditches



8 The bigger PGW ditch

mentioning in this connection is a general slight ascent of the level by ca 1.0m towards south.

Through erosion and flooding the ditch system seems to have been filled up in relatively short time. Thus an effort was made to erect again a sort of small bullwork, the height of the dwelling level in the southern, inner region still unchanged. The new, rather narrow ditch with a depth between 0.80 and 0.90m followed the course of the larger ditch of the older construction. The bank between the former ditches, eroded in the meantime, was raised to ca 0.50m thereby. The ground extending northwards had raised too so that for the second phase of Level 40 an average height of 14.50m was to be noted for the southern as well as for the northern level. In contrast to Phase 1, an increased accumulation of sherds was to be observed at this height in the outer region as well.

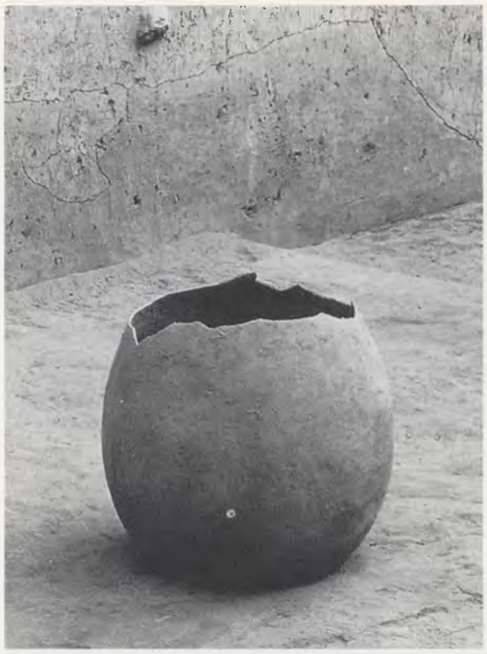
Above the alluvial and filling layers of this second phase of Level 40 several conflagrations and ash deposits, upto 1.00m wide, were found in the ditch area. Of different strength, partly upto 20.0cm thick, they could be followed in the course of the ditch for a length of more than 8.00m. They consisted of several layers of reddish brown to black ashes with scanty remains of charcoal, mixed partly with sand.

Level 39

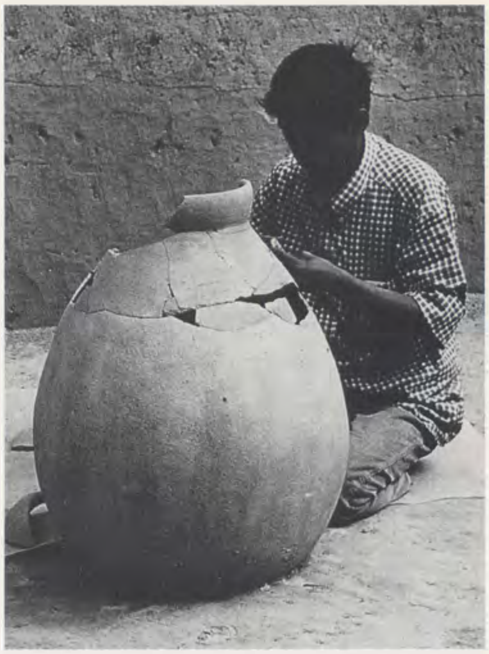
Within the ca 1.00m stratum rising above the lowermost Level 40, it was rather difficult to gain a clear stratification. The homogeneity of the deposit-layers prevented the tracing of levels over a longer distance. It was only possible to determine a sequence in places of limited, superimposed layers of sherds, ashes etc. Fortunately, this opportunity was given to a certain extent in the northern part of Trench 1 (3 II/Ca).

The level of ca 14.80 in 3 II/Ca, ascending to ca 14.85m in the southern area of the trench, must be regarded as new phase of habitation. A big jar of red ware (POTTERY I.40), standing in the ground was found at 3 II 0.2/Ca 17.8. The base lay at 14.80m, directly above a layer of ashes of the filled-up ditch system (Fig. 9). The vessel, sunk ca 10.0cm into the soil, was still exposed ca 45.0cm above the level. The rim and portions of the shoulder were broken off on account of the soil resting on them later on, their sherds however were found on the bottom inside the vessel and could be joined on the spot. The excellent state of preservation speaks of a long period of use. The diameter of the jar is 57.5cm, its height 76.0cm (Fig. 10). Presumably it was used as water jar because neither any remains of grain nor any residue of decomposition were found inside the vessel. Smaller traces of flow, like a flat gully filled with alluvial sand, to the north of the vessel, support this conclusion. North of the base of this pot, in a height of 14.90 to 14.80m, an intense occurence of potsherds was to be observed likewise.

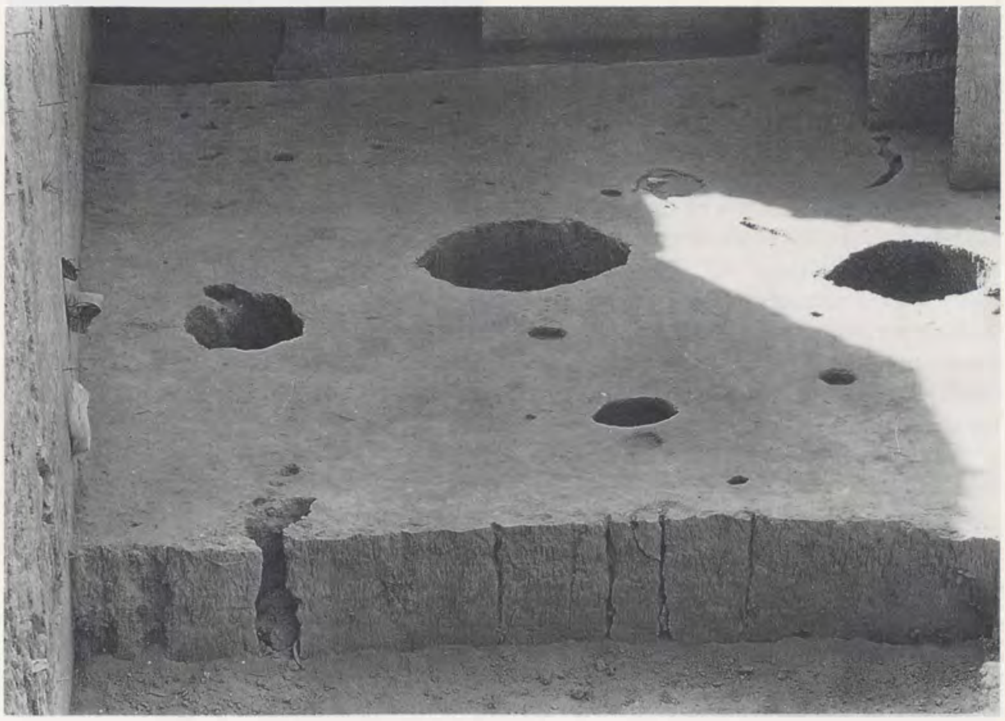
A layer of grey-brown ashes at 3 I 17.5–19.0/Ca 18.0–19.5 ascended slightly towards south from 14.70 to 14.95m. The average thickness of this layer, a mix of rotted remains and sand, amounted to ca 10.0cm. Also belonging to this level is a layer of sand in 3 I 6.5–15.0/Ca 13.5–19.5 with an average height of 14.85m. Irregular depressions with diameters between 10.0 and 35.0cm of various depths (post-holes), filled up with brownish loamy sand, as well as some smaller gullys make it possible to fix this occupation phase. Four small holes, arranged around the bigger depression, resulted in a slightly



9 Big red ware jar in PGW-Level 39



10 Jar of fig. 9 being put together



11 Sand floor with post-holes, Level 39

rhombic ground-plan from 2.70 to 2.90 m. Most probably, they are to be regarded as post-holes of a wooden construction similar to a "tent" with central support (Fig. 11).

The charcoal specimen, collected at 3 I 11.5/Ca 14.2, H. 14.80 m and to be assigned to this level showed for this height a date of 695 cal BC (see CHRONOLOGY).

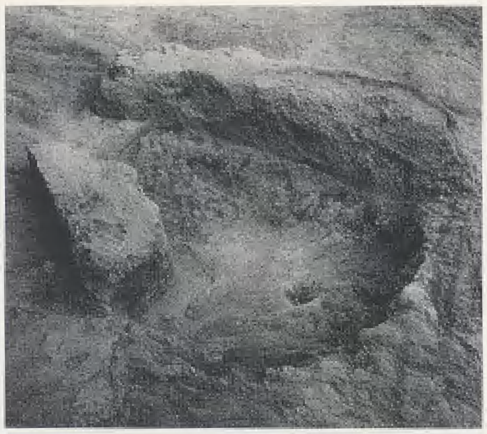
Level 38

Level 38 could only be marked out in the region of 3 II 6.25–7.7/Ca 13.5–17.0. Remains of animal bones together with ash spots and traces of conflagration near the fragments of vessels allow to consider this area with an average height of 15.00 m as a habitation level. To the south of this field, at 3 II 5.9/Ca 14.5–15.5, were found at the same height some burnt red lumps of clay, most probably remains of fireplaces.

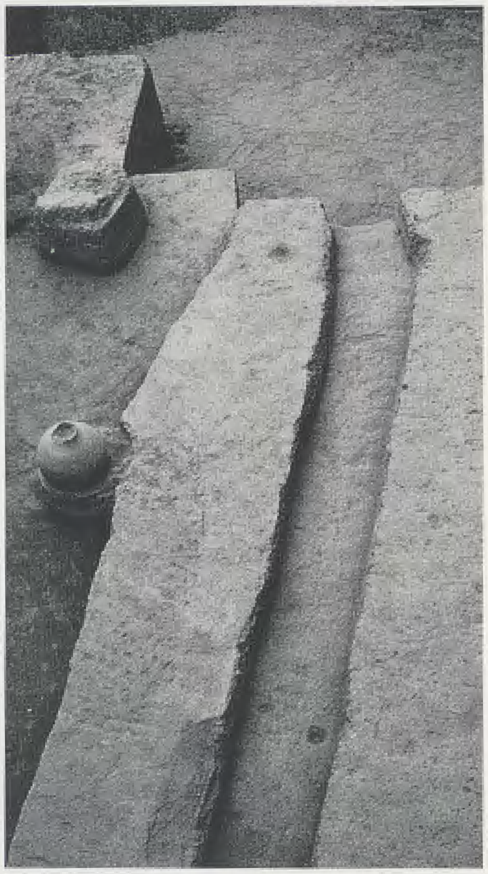
Level 37

The uppermost occupation level, ascertained within the PGW period, lay at a height of 15.20 to 15.30 m. In the northern part of Trench 1, at 3 II 4.5–7.0/Ca 15.5–18.0, a fireplace of loamy-clayey sand was exposed (Fig. 12). The slightly oval, ca 55.0 cm wide and 70.0 cm long construction was situated on a level of 15.25 m average height. The fire-pit was sunk 8.0 cm into the ground. Its bottom as well as the inner sides of the ca 10.0 cm thick and 12.0 cm high walling were reddened by burning. This walling is likely to be considered as horseshoe-shaped, inspite of partial destruction. To the south of the fireplace, at a distance of ca 0.55 m, was situated a 25.0 cm deep pit, diameter 75.0 cm. Its filling consisted of darkish yellowish brown and loamy sand with some rotted remains. The significance of the pit in connexion with the fireplace remains unclear. In the neighbourhood (3 II 7.0–7.7/ Ca 13.5– 14.5) was ascertained in a height of 15.20 m a thin layer of rotted remains of plant origin. To the west, bordering almost directly on the fireplace, was found a ca 10.0 cm thick layer of ashes, reddish brown to light grey, mixed with sand and rotten material. It extended over the area 3 II 6.2–7.2/Ca 18.0–19.5 in a height of 15.15 to 15.30 m, probably used as a dump for the ashes produced by the use of the fireplace.

The upper edge of the destroyed shoulder portion of the big water jar of Level 39, about 6.00 m south of the fireplace, was reached at ca 15.25 m. It cannot be said with certainty whether this pot was continuously used upto the time of Level 37, but a longer duration of use exceeding the period of Level 39 can be assumed definitely.



12 Fireplace in Level 37, Trench 1



13 Gully in Level 37, Trench 1

In a height of 15.16–15.21 m a small firm sand-loam level was preserved in the southern part of Trench 1 (3 I 3.5–7.5/Ca 14.0–17.5). In this field a gully was found, 0.40–0.45 m wide and running from NNE towards SSW, in an average depth of 0.20 m (Fig. 13). In contrast to the more yellowish ground it was filled up with sand of whitish colour. A little westward of the gully, at 3 I 6.2/Ca 14.0, a globular jar was found standing in the ground (POTTERY I.53). Its bottom lay at 15.10 m, the upper edge of the broken rim portion at 15.40 m. The missing sherds, found in the vicinity, could however be joined to it later. It is a 36.5 cm high vessel of Red Ware with dark red vitrified slip. Noteworthy is a stamped potter's mark on the inner side of the rim, a circle with a semicircle opening above, of the height of 0.8 cm. Another sherd (So II 2431) with the same mark, found in the direct neighbourhood, gives evidence for a frequent use of this sign at the time. A nearly round and reddish burnt sand-loam area, diameter ca 0.50 m, was situated a little northwards of the vessel. It could be interpreted as the spot of a fireplace.

The upper edge of the whole, clearly marked stratum of PGW levels did not run quite horizontal in this southern part of Trench 1. At the western side, it lay at 15.50 m, in the central region directly beneath the foundations of the mud wall in Level 35. The lower edge of this foundation, height 15.40 m, corresponds to the upper edge of the vessel described above (I.53), the rim of which had been destroyed during the work for the mud wall. At the eastern side, soil of a different colour lay directly above the Level 37, resulting thereby in a surface slightly sloping from west towards east, of the PGW deposits. The jumble of layers above 15.30 m in the northern part of Trench 1 made it impossible here to pinpoint the upper boundary. Rather there was a picture of mingling and of gradual transition from the ochre-coloured sandy soil of the PGW levels to the more loamy earth of the younger periods coloured dark to an increasing extent and interspersed with ashes.

2. Further Trenches

The different trenches carried out in successive years inside and outside the main excavation area furnished additional informations on the extension and sequence of the different periods of habitation. In the following report they are dealt with in chronological order of their excavation.

Trench 2

Trench 2 lies at a distance of 140.00 m from Trench 1 on the south-eastern rampart of the citadel mound, where a part of it had been cut off by a merchant in recent years. The cut was restricted to 3.00 by 3.00 m, the alignment oriented on the local conditions. Starting at about 17.30, the upper edge of the PGW stratum, consisting here of the same firm yellowish-ochre coloured sand as in Trench 1, was reached at ca. 16.30 m. Besides large numbers of sherds of PGW as well as BRW, single fragments of treated shell and bone were found. At ca 15.30 m, the natural soil was reached directly below the lowest PGW level. Rather conspicuous is the conformity in the total thickness of the levels of the PGW period, about 1.00 m, as met with in Trench 1.

Trench 3

West of the plateau, directly at the foot of the rampart of the citadel elevation, the Trench 3, 4.00 m wide and 7.00 m long, was laid in west-east direction (2 V/Bd). The excavation of the PGW stratum, upper height at about 16.40 m in this area, brought a rich result in bigger fragments of the typical PGW (POTTERY I.3; 7; 9–10; 14–15). Similarly, besides the normal Red and Grey Wares, sherds of BRW were found as well (POTTERY I.19; 21).

The heigth of the natural soil of the southern part, lying higher, amounted to ca 15.00 m, being bounded diagonally by an embankment edge, running from WNW towards ESE. North of this line the natural soil was secured at ca 14.00 m. Due to the limited dimensions of Trench 3 it could not be ascertained whether this had to be regarded as a natural gradation of the site or to be attributed to human activities. There are several reasons speaking for a further ditch system similar to the structures found in Trench 1. Not only that the embankment was running almost parallel to the course of the ditch in Trench 1 but also the alluvial layers marked out in the east profile can be taken as support for this conjecture. They correspond to the typical and unmistakable picture of the alluvial and deposit layers in the filled-up ditch construction of Level 40. As there, several ash layers could be located in the upper third of the levels in Trench 3. In the north-eastern corner of the excavation area a further depression was noted starting from the level 14.10 m. As the depression could be exposed only to a small part, it remained unclear whether it formed part of the assumed ditch structures or, more probable perhaps, a sort of well structure, which was filled up with mostly reddish ashes, sherds and rubbish after being out for use.

Within the filling layers of this area were found several big lumps of tempered and fired clay in a height of 14.80–14.20 m. Vaguely similar in shape to baked bricks, they are probably to be regarded as remains of fireplaces.

Trench 4

As the last of the trenches laid outside the main excavation site, Trench 4 was measured in at the foot of the southern rampart of the mound (2 I/Bd), about 80.00 m southward of Trench 3 and 40.00 m northwest of Trench 2. Unfortunately, a part of the deposits of this 5.00 by 10.00 m wide trench was disturbed by the large moat, dug in the times of Level 4, partly reaching down to the natural soil and surrounding the whole citadel elevation. The natural soil was reached in the northern part at 15.50 m, towards south, the ground rose to 15.75 m. The strength of the deposits of PGW could not be determined precisely. The upper edge of the slightly loamy ochre-grey sand-layers was reached in a height of ca 16.45 m. Above it, most varying layers were deposited upto ca 17.60 m. Between 16.70 and 16.80 m, above a dark layer of earth with a few PGW sherds, the whole area was covered by a 10.0–15.0 cm strong layer of debris and lumps of fired clay. Within this layer could be preserved several small fragments of clay-daubing burnt red by fire (So III G 168–175), apparently to be regarded as remains of a clay-daubing on canework of the strength between 0.6–1.3cm. The lumps found were of clay of very fine texture. In connection with the slightly concave curvature of the pieces, this indicates that they might be remains of a fine interior daubing of a round house of canework (cp. B. B. Lal 1954/55, p. 13).

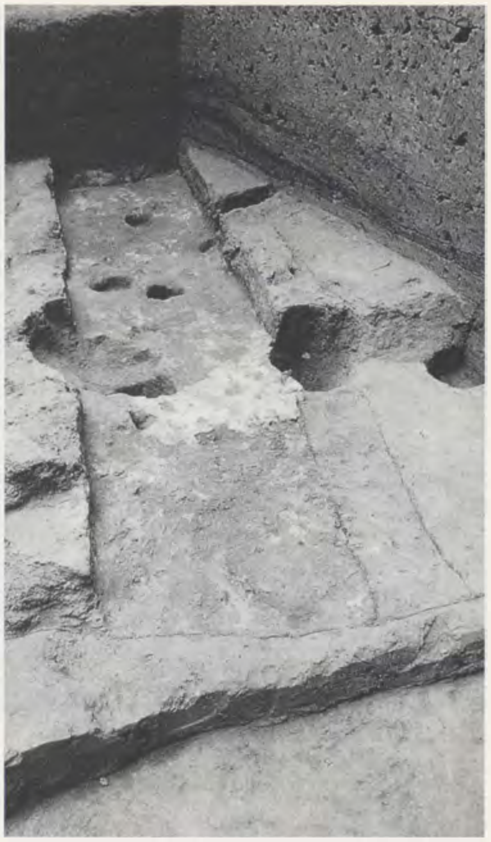
Above this layer of burning and destruction followed layers of alluvial sand being interspersed with sandy clay. At ca 17.60 m occured lumps of clay, tempered strongly with fibres of plant, not burnt thoroughly, in the midst of yellowish sand, overlaid by a layer of ashes.

The total number of pottery sherds found was too small to get an exact sequence of the levels with the help of their distribution. However, the BRW sherds were found together with the PGW almost exclusively in the lower stratas.

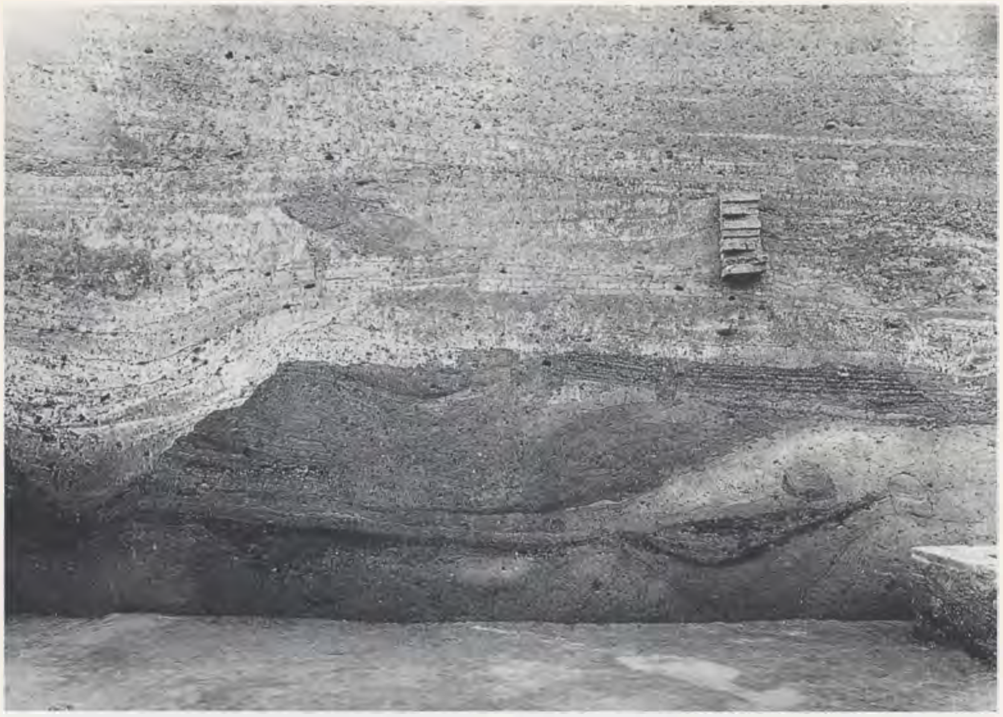
It seems probable that this area was not colonised for a time. The alluvial layers encountered above 16.80 m point to this as well. Through erosion of the settlement area, situated higher on to the north, a gradual elevation of the area took place towards the end of the PGW period though.

Trench Area 2 IV/Be

In addition to the trenches described above it was tried to obtain further informations on the situation of the PGW levels within the boundaries of the main excavation area, without endangering the substance of the structures, worth preserving, of younger levels. In the southwest corner of the excavation field, in 2 IV/Be, the upper edge of the PGW levels was reached at ca 15.95 m. The last level of the PGW period was constituted by a structure not to be ascertained clearly in its function like that of Level 37, described above.


14 Gully in Level 37, Trench 2 IV/Be

In the southern part of the excavated area came to light the remains of a ca 3.00 m long gully, 50.0–55.0 cm wide and running from WNW towards ESE (Fig. 14). Right and left of its course stood out clearly perpendicular casings 15.0–18.0 cm strong, which were burnt red and blackened in part in the inside. The gully was filled up with a more or less 8.0 cm thick layer of yellowish white to light grey ashes, the ground burnt strongly red. The upper edge of the casings lay at 15.82–15.99 m, partly destroyed by the following level, the bottom at ca 15.80 m. The height of the area north of it is to be fixed with ca 15.90 m. Below this level no further structures or levels of occupation could be determined. However, in a height of 15.40 m a charcoal sample could be taken from the spot 2 IV 8.45/Be 17.50 which produced a date of 648 cal BC (see CHRONOLOGY). The finds, modest occurrence of PGW sherds, offered no help for a division of this



15 Trench 2 IV/Cc. Western profile

package of levels in different occupational phases. Underneath 15.00 m isolated sherds were found only sporadically; a gradual transition to the natural soil interspersed with kankar was to be noted.

Trench Area 2 IV/Cc

The 9.00 by 17.50 m large trench laid at the eastern side of the excavation area gave some important hints regarding the situation at the beginning of the occupation of the site. Underneath the earliest building structures, i.e. mud wall structures of the Level 35, exclusively alluvial layers of differing consistence were discovered, their nature could be examined by going down, in some parts, to 12.60 m. They formed the filling of a great ditch which ran through this part of the excavation site from NNW towards SSE. Its presumed width amounted to 9.00 m, its depth at least 3.50 m. Because of the small area exposed and the destruction caused by the moat of Level 4 sunk in in late medieval times, the exact chronological assignment was rendered difficult, there were however some helpful hints in the trench area.

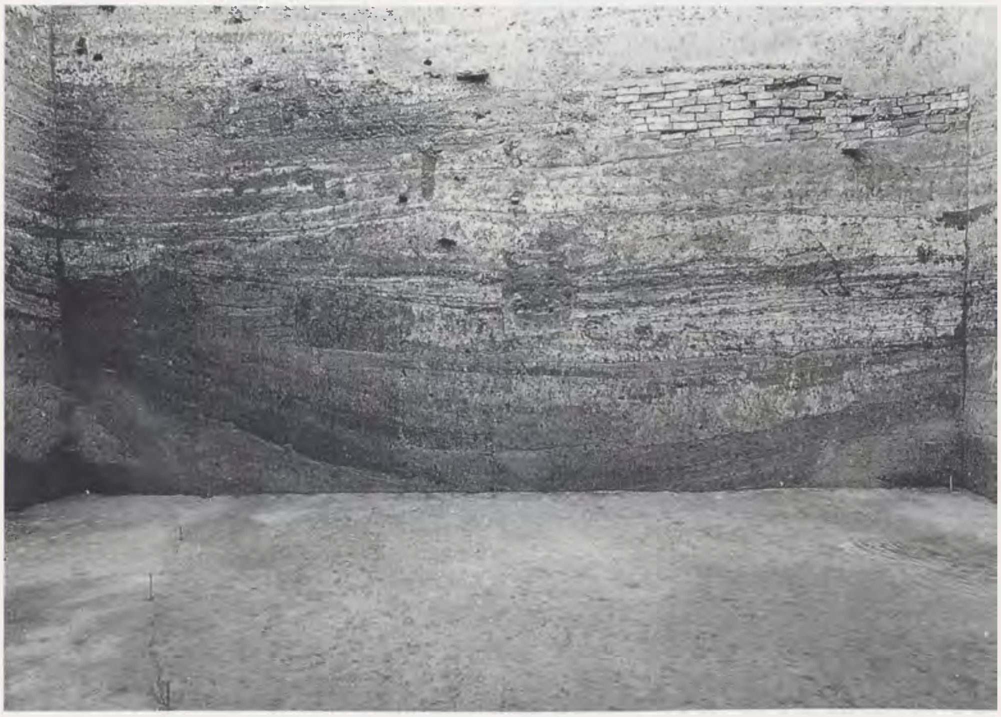
At the eastern side of the ditch, i.e. in the northeast corner of the trench, the original level was found undisturbed in a small area, height 14.60 m, upon which later layers in a strength of ca 0.30 m, upto the lower edge of the foundation of Level 35, had been deposited. West of this socle of the natural soil, composed of ochre to light grey sand, the slope of the ditch dropped deeply down. In the southwest corner of the trench, only in a small part, sherds of PGW were found. Apart from this, the western side showed bigger erosions and ditch-like inlets, whose alluvial layers alternated with those of ashes and conflagration deposits (Fig. 15).

The lower alluvial layers of the ditch, consisting of a material similar to the natural soil, contained no sherds at all but a big quantity of incrustations. This speaks for the existence of the ditch before the beginning of the settlement of the Painted Grey Ware time, thus excluding that we are dealing with an artificially made ditch, similar to that of Trench 1. It is rather to be regarded as a side branch or an old bed of the river, following the course of which the modern canal was built in later times.

Above the levels of eroded natural soil follows a package of alluvial layers clearly to be assigned to the PGW period, partly mixed with collapsed-in materials of the slope. The river appears to have worked a new course in the PGW era for in this period the gradual filling-up of the old bed was completed (Fig. 16). It could be ascertained with the help of the profiles following the ground surface level of the deposit layers that only in the west of the river(-bed or branch) in course of the PGW period an increase in height, caused by human settlement, of more than 1.0 m took place while in this time the height of the eastern area, lying outside, remained nearly unchanged.

The slope at the foot of the ground elevated by the deposits of the PGW people, with its angle of inclination of 25°, was covered by an upto 3.0 m wide conflagration deposit, height ca 15.50–14.25 m, covering the layers of the PGW levels. Upto 5.0 cm strong, it consisted of red to black ashes with mixtures of charcoal, the sandy soil below burnt reddish.

It can be presumed that towards the end of the PGW period, when the river was nearly filled up and bigger erosions of the embankment did not occur anymore, a dense



16 Trench 2 IV/Cc. Northern profile

vegetation grew on this slope which was destroyed by fire. A charcoal sample of the conflagration deposit taken at the place 2 IV 15.95/Cc 2.30 at a height of 14.77m produced a date of 504 cal BC (see CHRONOLOGY).

3. Synopsis

A synopsis of the dates and information obtained through the various trenches yields a general picture which, to a limited extent, elucidates the situation in the beginning of the settlement of the site by the Painted Grey Ware people.

We do not know the reason for a settlement just at this place, but the scenery, which the PGW people found there and which might have contributed to this decision, can be recognised in rough outlines.

The branch of river found in the eastern part of the excavation area crossed the site from NNW to SSE, possibly as part of a meandering river crossing the alluvial plane. The area adjoining towards west rose from northeast (Trench 1) towards southwest uniformly for more than 1.50m. The highest landmark of the natural soil was reached with 15.75m in Trench 4. Towards southeast, i.e. the Trench 2, the ground descended slightly. This increase in height let one expect the centre of the settlement in the vicinity of Trench 4 or still further west or southwest, the settlers preferring certainly to erect their homes on a somewhat higher level in order to protect them against possible inundations.

On account of the limited excavated area no remains of structures whatsoever could be unearthed of this earliest occupation of the mound. However, the post-holes in 3 I/Ca assigned to Level 39 as well as the remains of daub from a latticed wall, found in Trench 4 and ascribed to the late phase of the PGW period, give indications regarding the prevailing method of construction. The yield of finds in Trench 4 and the area 2IV/Be, i.e. in regions situated more central according to the above-mentioned hypothesis, was very paltry. Rather conspicuous, on the contrary, was the occurrence of sherds on the periphery, in the Trenches 1 and 3 as well as in Trench 2. The abundance of sherds and vessels in the ditch of Trench 1 corresponds with the rich finds in the alluvial layers in Trench 3.

It remains unclear whether the ditch system, to which the part exposed in Trench 1 belongs, had a connection to the branch of river running further eastwards or not. Such a connection would however be imaginable and offer an explanation for the deeper erosion of the ditch bottom met with at the eastern side of the exposed part. However, a possible turning of the course of the ditch into the southern direction, parallel to the course of the river branch, cannot be excluded totally.

The rather small dimensions of the double-ditch of Sonkh with its slightly raised middle dam in 3 I/Ca do not allow us to assume a fortification like that of the early historical time with its parapets and ditches of bigger extent. However, it was part of an enclosure of the first Painted Grey Ware settlement anticipating the elements of later defensive works. It served for the protection of the people living at that time most probably still in tents or in huts made of wood and shrubs with daub as well as for the protection of cattle. Perhaps there was on the crown of the embankment a palisade made of wood and shrubs in order to prevent the intrusion into the area of settlement, yet, it remains unclear to what extent the structure would have served as a safeguard against inundations. So far, the profiles showed no traces at all of a flooding or inundations from the northern side.

For the early Painted Grey Ware period the river branch formed the eastern boundary of the settlement, in the north the settled area was bounded by the ditch system of Trench 1. Even in later times, these boundaries seem to have hardly ever been exceeded towards the east and only insignificantly towards the north. Two small trial trenches to the north brought not the slightest indication of a settlement in this area at the time of the Painted Grey Ware people. The natural border formed by the river bed was overpassed for the first time by building structures in the time of Level 35 attributed to the Maurya period.

The general thickness of the PGW levels altogether varied between 1.00m in Trench 1 and over 1.50m in Trench 4. A sequence of levels could not be established with the exception of Trench 1. This is to be assigned partly to the homogeneous soil in the whole of the PGW region and partly to the fact that within the rather spacious area not all parts were densely built upon at one and the same time. In the course of an extensive excavation in the centre of the PGW settlement, i.e. underneath the preserved structures of later levels, different phases of habitation would be found for this early time beyond any doubt.

B. THE TRANSITIONAL PHASE: LEVEL 36

Change of Soil Conditions

The strict separation, ascertained specially in the region of Trench 1, between the soil material of the PGW levels and that of the following levels was confirmed in the other trench areas in course of the excavation. The question arises whether this difference in the soil condition indicates a longer interruption in the sequence of settlement. The following observations may offer an answer.

1. In the area 3 I/Ca yet a ca 20.0cm thick layer of yellowish loamy sand lay over the ground of the last PGW level. Above this clearly marked layer followed a mud wall structure which had been founded partly into the PGW level. The roof structure of this building had been destroyed by fire.
2. In the eroded area of the ditch in 2 IV/Cc followed above the conflagration deposit several muddy dark grey layers of soil, partly with inclusions of sand, which are to be dated into the Post-PGW period on account of the pottery found there. The depth of this package of layers varies between 10.0 and 20.0cm at the slope and 60.0cm in the middle of the ditch. On top of the alluvial layers a mud structure was founded the straw or reed roof of which was likewise destroyed by burning. This conformity as well as the similarity of the find materials allow us to date both the structures in the same settlement phase.
3. In the trench area 2 IV/Be, directly above the last PGW level at the average height of 15.90m, a hard and greyish mud level with some post-holes was conserved at 15.95m. Another level followed at a height of ca 16.20m, showing an oval arrangement of post-holes connected by a groove. The lowermost level with mud wall houses was reached here only in a height of 1.20m above the last PGW level.

A synopsis of these facts obtained in the various trenches gives support to the conclusion that also in the transitional phase between the end of the Painted Grey Ware time and that of the Early Maurya period the mound of Sonkh was populated without a let-up. The change in the soil conditions seems to signalize no important consequences in the succession of the settlement. The question how far this change has to be seen in close relation with the end of the PGW time or has to be taken as a coincidence must remain unanswered.

The settlement in this transitional phase to the mud wall structures of the succeeding levels, henceforth called *Pre-Maurya*, appears to have likewise been concentrated in the south-southwestern area because structures of Level 36, belonging to this time were discovered only in 2 IV/Be and not in the areas lying further north and eastwards, a further correspondence with the structures of the PGW time whose centre is to be assumed in this region likewise.

For the area of Trench 1 followed a phase of building inactivity, an explanation why the change of soil is marked here so clearly and undisturbedly. At the same time, the depression still present in the course of the old river branch in the east was filled up further with eroded material containing the terracotta and pottery fragments of the time.

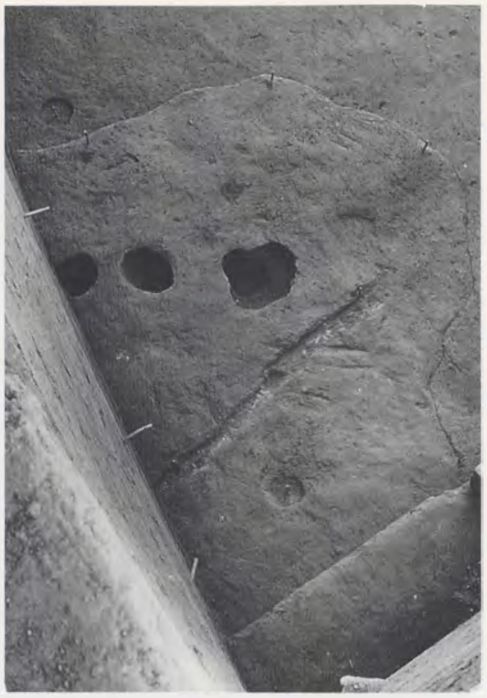
A direct alteration of the building method could not be observed. Similar to the upper PGW levels the structures of this phase are to be imagined as wattle and daub constructions. A ground-plan of such a house was marked in the mud ground of Level 36, Phase 2, as described below. A further indication of the continuance of the cultural tradition, also to be noticed in minor works, e.g. shown in the further manufacture of vessels of the normal Coarse Grey Ware beside a black-slipped variant, were the finds of vessel fragments with a stamped potter's mark. There were samples of this stamping which, although varying in shape (POTTERY II.16), are to be ascribed in their type to those evidenced for Level 37, the uppermost of the PGW levels (POTTERY I.53).

Structures of Level 36

The discovered traces of structures of this transitional period, taken as Level 36, have to be assigned to two different phases.

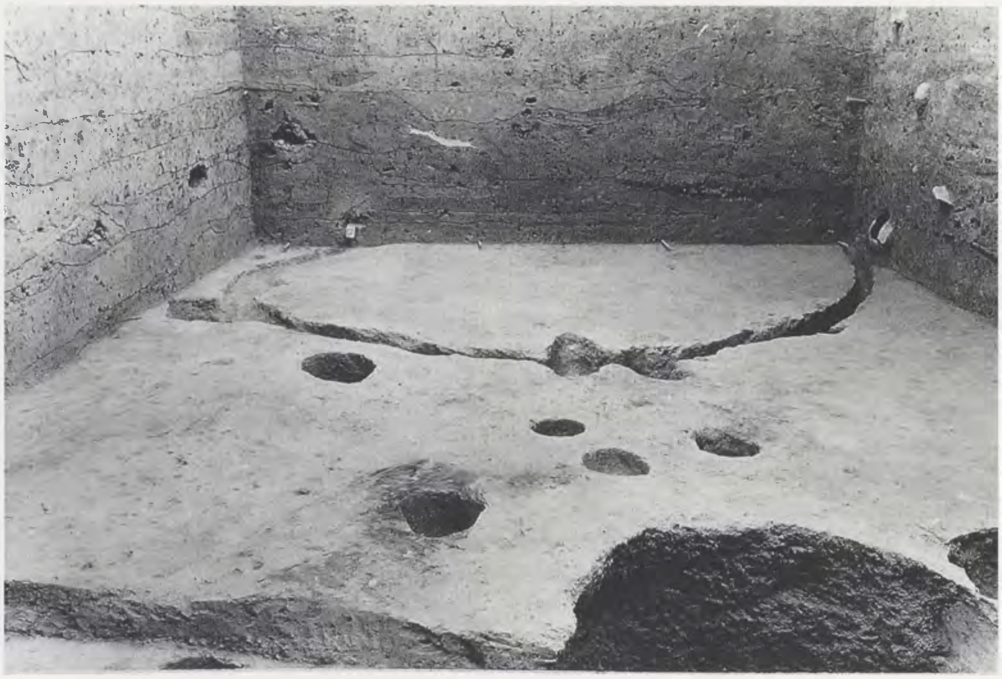
Phase 1 consisted of vestiges of a level of brownish grey mud in 2 IV 2.5–6.5/Be 15.5–19.5, with three post-holes in line. Its depth lay between 30.0 and 35.0 cm, with an average distance of 45.0 cm; its diameter amounted to 25.0 cm on the average (Fig. 17). The mud area sloped slightly from south to north from 16.00 to 15.90 m. A little eastward of the post-holes a narrow shallow gully was exposed containing paltry remains of whitish decomposition. On the mud floor beside the post-holes were found some remnants of brick-like material, probably burnt daub.

Phase 2 is to be identified with a mud level which could be followed across the whole excavated area of 2 IV/Be. Its height ranged between 16.29 and 16.21 m. In the northern part of this area a kind of gully could partly be excavated showing a kind of oval shape with outer dimensions of ca 2.50 by 3.50 m (Fig. 18). The otherwise hard and brownish mud of the ground was interspersed strongly with yellowish sand (PGW ground?) within this oval. The depth of the gully, upto 10.0 cm wide, varied between 5.0 and 12.0 cm. This has to be taken as a depression marking the footing of a vanished hut whose superstructure was of perishable material like wattle-and-daub, the walls slightly inserted into the ground.


17 Mud floor with post-holes, Level 36/1

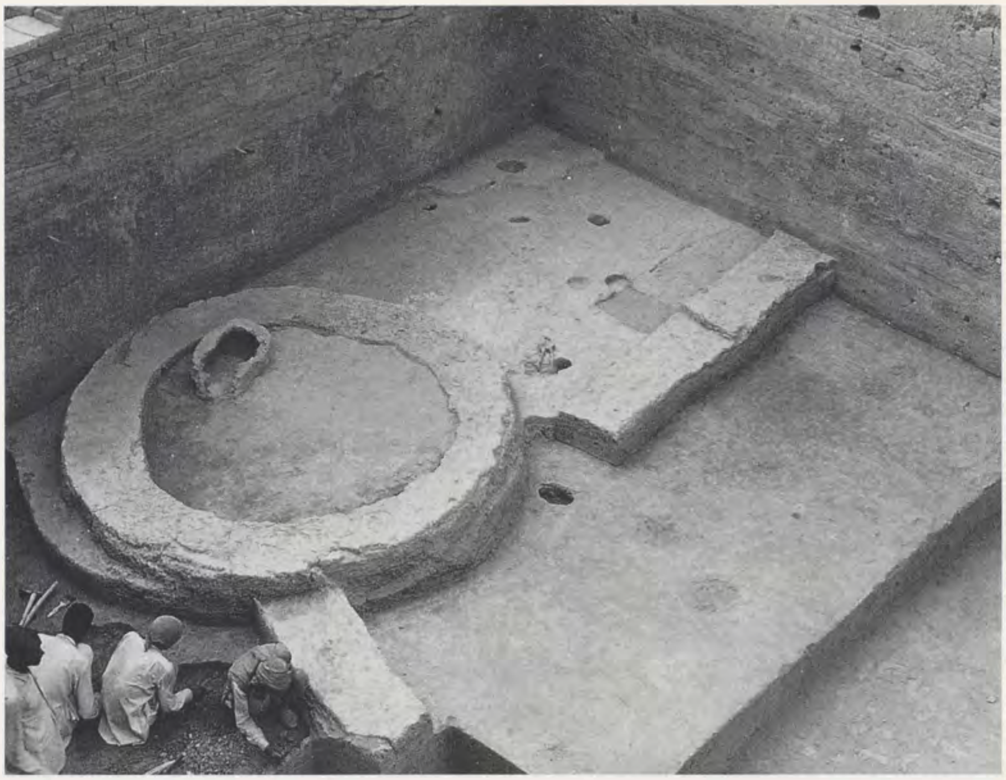
The post-holes of bigger sizes in the southwest of the gully may have been the foundation holes of wooden props or supports. There dimensions not necessarily due to constructional reasons, one might regard them as framing the entrance opening towards southwest. The continuous gully may indicate that the entrance was furnished with a treshold. The smaller post-holes may be understood as indication of a canopy construction in front of the entrance. The strong oval shape of the post-holes prepared in the course of the gully, in one case with a proportion of ca 50.0 by 20.0 cm, catches the eye. The larger diameter here is directed at the centre of the oval. In a second case the inner side was showing a strong angle of slope, possibly an indication for walls inclined strongly inwards.

The post-holes lying outside were all nearly circular, narrowing downwards conically with semicircular bottom. Their depths varies between 10.0 and 15.0 cm. Traces of soot and remains of mud burnt black in the vicinity of a small depression at a distance of ca 1.25 m from the outer edge of the "house" suggest this area as the spot of a fireplace. In a pit 35.0 by 45.0 cm in size and ca 25.0 cm deep situated 1.00 m westward most probably a storage jar was placed.


18 Mud floor with oval gully-like deepening and post-holes

C. THE PERIOD OF THE MUD WALL STRUCTURES

From the beginning of the Pre-Maurya upto the time of the Śuṅga Cultural Phase the buildings of the old Sonkh were made of mud walls. Presumably towards the end of Level 36, for the first time, in this region a bigger settlement developed with people settling down, becoming resident. A development which led to the construction of larger houses, built more solid and durable. Thus in this region of rural character the transition from structures of wattle-and-daub or wood to houses constructed of mud walls took place. This transition stage is still noticeable in the ground-plan of the structures, i.e. in the type of round houses typical of buildings made of perishable materials.



19 Round mud house with post-holes, rotten rope of Level 35, and a fireplace of Level 34

Level 35

1. A fair example of this development is the mud wall house exposed in 3 I 3.5–8.5/Ca 6.5 – 17.5, height 15.40 – 15.80m (Fig. 19). The lower outer diameter of this round house made of a mud wall, ca 50.0–65.0cm thick, varied between 3.50 and 3.65m. The wall, almost perpendicular on the inside, was outwards, as far as to be ascertained by the 40.0cm high socle, tapering upwards.

Within the circular building whose foundation height lies at 15.40m on the average, a mud level was preserved which slopes slightly from west to east from 15.58 to 15.47m. As the socle of the mud wall rises above this floor between 20.0 and 30.0cm and no indication could be found of an opening, it must be presumed that there was a threshold to the door, at least 20.0cm high, which might have served as protection against rainwater oozing in.

The average height of the outer ground-level, identical with the inner floor level, lay at 15.58m. West of the circular building the level was bounded towards north by a ca 65.0cm broad mud wall standing up to about 10.0cm. Presumably it was part of the northern enclosure of a courtyard belonging to the round house, oriented towards south. The socle breaks off rectangularly just 45.0cm before the round wall creating thereby a narrow passageway. Remains of a mud wall were also exposed in the east directly connected with the circular building taking a course towards north-east.

Irregularly scattered all over the region of the preserved clay-floor were found some depressions and post-holes of different size and depth. One of these post-holes in the direct neighbourhood of the passageway, 3 I 7.05/Ca 10.65, deserves special attention. The upper diameter of this hole, narrowing downwards conically, amounted to 17.0cm, its depth ca 25.0cm. At the edge of the connecting flat pit, diameter 35.0cm, there was found a noose-shaped object, ca 40.0cm long and 12.0cm broad, lying directly on the mud floor (Fig. 20). It consisted of sandy-muddy earth of brownish colour, diameter ca 2.0–2.5cm. It is obvious that these are the remains of a rotten rope with which the cattle used to be tied to the stake, it's place marked by the post-hole. The mud floor, therefore, seems to represent the court area of the property. To the north of its enclosure wall no firm floor was to be determined.

Two-third of the ground of the circular building whose inner diameter amounts to 2.50m was covered with a deposit of ashes and conflagration, upto 20.0cm thick. It consisted mostly of blackish-greyish, less reddish ashes mixed with clods of mud. It must be assumed that the roof, made of light wood and covered with grass, was destroyed by fire and its ashes fell into the interior of the house. The clods of mud found there suggest that at least the last "courses" of the wall below the roof construction were composed of a sort of mud-"bricks".

A mud well, discovered at 3 II 3.5–4.4/Ca 17.6–18.3, starting at the height of 15.60m, can be regarded as belonging to this Level 35. With an upper diameter of 0.90m, slightly narrowing downwards, it ended at ca 10.30m in the ground water-level of the sandy ground. Serving as a rubbish pit after being out of use, it was filled up in the upper part mostly with ashes, bones etc. The excavated material of the deeper section yielded, besides profuse sherd materials, a larger number of undamaged vessels which can be assigned to the early occupational phase of the well (POTTERY II.5; 20–26).

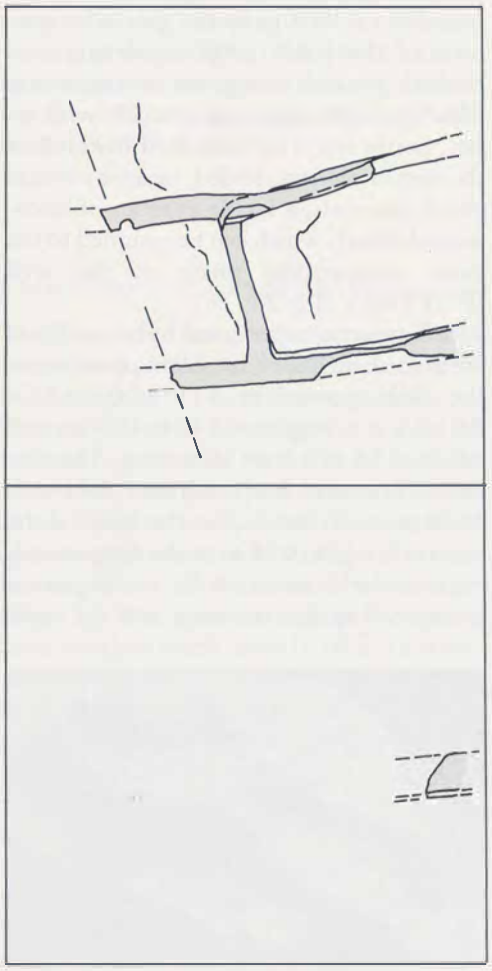
2. Likewise to be assigned to Level 35 are the structures above the filled-up layers of the ditch exposed in 2 IV 12.0–18.0/Cc 2.0–9.5 at a height of 14.34–15.26m and oriented in east-west direction. The distance between both regions measures 45.00m, nevertheless, on the basis of the objects found as well as of the correspondence in the destruction by conflagration mentioned earlier, a dating into the same

20 Detail of fig. 19: the rotten rope

period can be regarded as secure inspite of the difference in height of ca 1.00 m due to the level of the ditch. In contrast to the area 3 I/Ca, no circular type but a part of a surprisingly large, nearly rectangular and probably single-roomed mud wall house was exposed (Fig. 21).

At the western side the outer width amounts to 3.80 m, increasing upto 4.50 m towards the centre. So far as it can be recognized, this is to be assigned, at least partially, to a sagging and bulging of the southern wall caused by the settling alluvial layers of the ditch. The ending in the east remains unclear on account of the limited area of excavation, the inner length of the house must have measured at least 4.50 m.

The walls, varying in thickness between 40.0 and 60.0 cm, consisted of argillaceous grey mud. Differences in the height of the foundations of the partly 70.0 cm high preserved mud walls were due to the condition of the building ground. The river-bed filled up only roughly with alluvial layers offered no even surface, and a levelling of the ground was obviously not regarded as necessary, resulting thus for the foundations in differences in height of more than 25.0 cm in the east-west and ca 60.0 cm in the north-south direction. Later sagging could have contributed only insignificantly because the floor within the house shows only minor differences in height.



21 Mud structures in 2 IV/Cc, Level 35

Yet, the derivation from the vertical line combined with a bulging of the wall upto 70.0 cm was especially strong at the southern wall as it was based entirely on the alluvial layers of the ditch while the northern wall was founded, at least in its eastern part, on the natural soil. To the south of the house, the ground inclined more strongly to the sector formed by the ditch which, still in the time of Level 35, remained a zone of erosion.

The court area belonging to this house was oriented most probably towards north. An enclosing wall, erected at the same time with the mud walls of the house, as extension of the southern wall towards east, formed a part of the boundary of this complex built directly at the foot of the slope, the angle of the embankment amounting to ca 20°–25°.

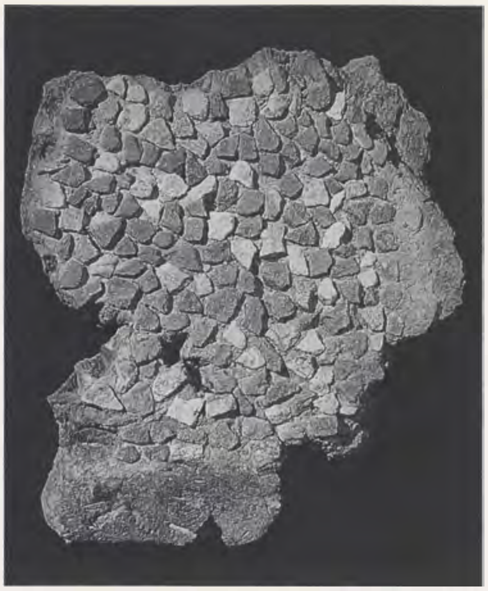
At a later date (Phase 2), yet another mud wall was erected nearly in extension to the northern wall. A clearly marked joint as well as differences in colour and the founding on a higher level speak for a later addition. It remains unexplained whether this room was roofed over or not. An occupational level which would have to be placed considerably higher than that of the adjacent room due to the slope could not be determined.

The floor of the excavated house was covered with an altogether 7.0 cm thick layer of ashes. Directly on the mud floor, burnt black, there was found a layer of red ashes, mixed with burnt-red clay, superimposed by layers of greyish blue ashes, mixed partly with reddish brown ashes; in the western third of the interior a thicker layer of whitish brown rotten material.

On the inner surface of the walls larger spaces of daub made of very hard and clayey mud were found, under which the wall had a peculiar black discoloration. It seemed as if this fine plastering contained an admixture of bright brick-red colour because a slightly red colouring could be ascertained even in those places where there were no traces of burning.

South of the house, at 2 IV 10.8/Cc 5.05 in the height of 14.65 m, was found a fragment of a mosaic (Fig. 22) of coloured pebbles pressed into strongly tempered clay, size 18.5 × 16.3 × 4.8 cm. It remains unclear whether it can be regarded as a fragment of floor covering.

Perhaps likewise to assign to this level in 2 IV/Cc are the remains of a mud wall in 2 IV 3.25–4.50/Cc 8.50–9.50, height 14.62–14.84 m.



22 Fragment of mosaic of coloured pebbles. Level 35

3. In the area 2 IV/Be an occupational level of a medium height of 16.70 m could be allocated to Level 35, some floor remains of which could be conserved in the excavated area.

Level 34

1. A hard clay layer with traces of ashes at the height of ca 15.80 m was located as Level 34 in 3 I 3.5–9.5/Ca 7.5–16.5, bounded at the east by a mud wall ca 55.0 cm wide and narrowing slightly upwards (Fig. 23). The course of the wall standing ca 10.0 cm above the level corresponded almost exactly to the north-south direction. In the ground in parts the outlines of the round house of Level 35 were marking themselves. The horseshoe-shaped fireplace of rather larger dimensions, ca 85.0 × 55.0 cm, was founded on the ash-layer of the round house, likewise marked in the ground northwards of the fireplace. The wall of the hearth was composed of reddish burnt clay, the filling, of ashes mixed with sand. Slightly to the southwest of the fireplace, a larger depression was exposed of the diameter 40.0 cm and filled with ashes.

A mud well located at 3 I 11.0/Ca 16.9 most probably belongs to this level. It has been sunk into the ground from the height of ca 15.85 m and ended at ca 10.30 m in aquiferous layers. The excavation of the well yielded in the lower region a large number of pails and pitchers, besides potsherds, fully preserved slipped into the well at the time of its use (POTTERY II.40; 44–47; 49; 55). The well tapering slightly in the lower part had an upper diameter of 1.20 m, widening on the eastern side ovally to 1.80 m caused by demolitions and erosions.

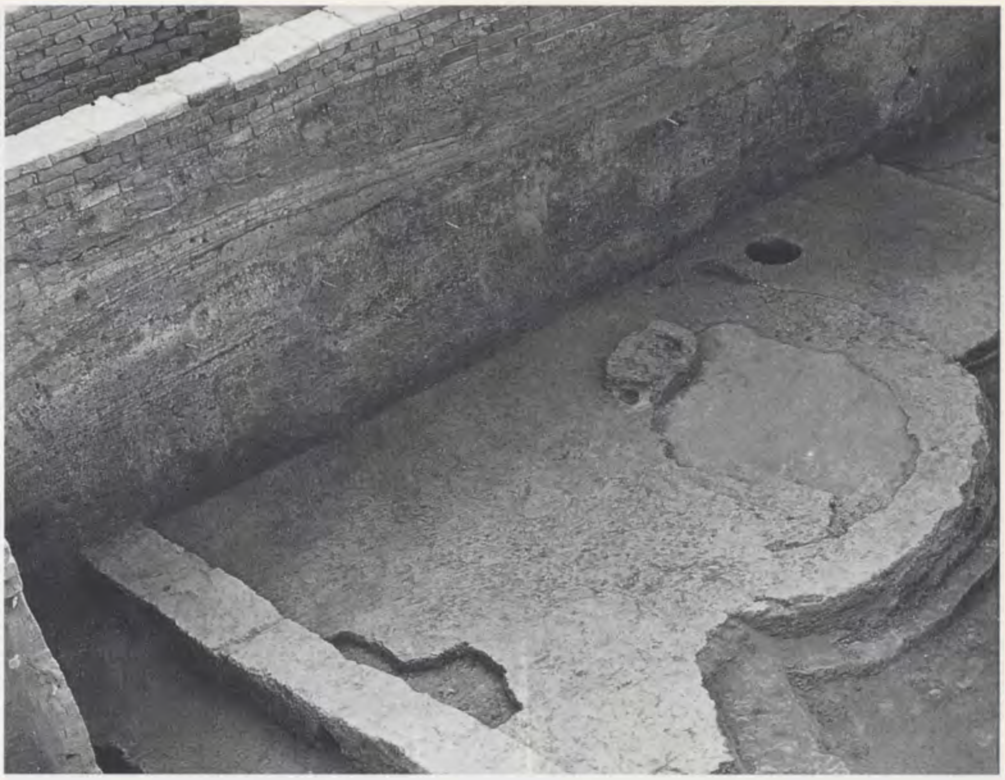
After being out of proper use, the well was used as rubbish pit and filled up with waste material (remains of plants, ashes, sherds, bones etc.). At ca 15.30 m was found a solid intermediate layer, the pit of about 0.55 m depth thus used as a fireplace.

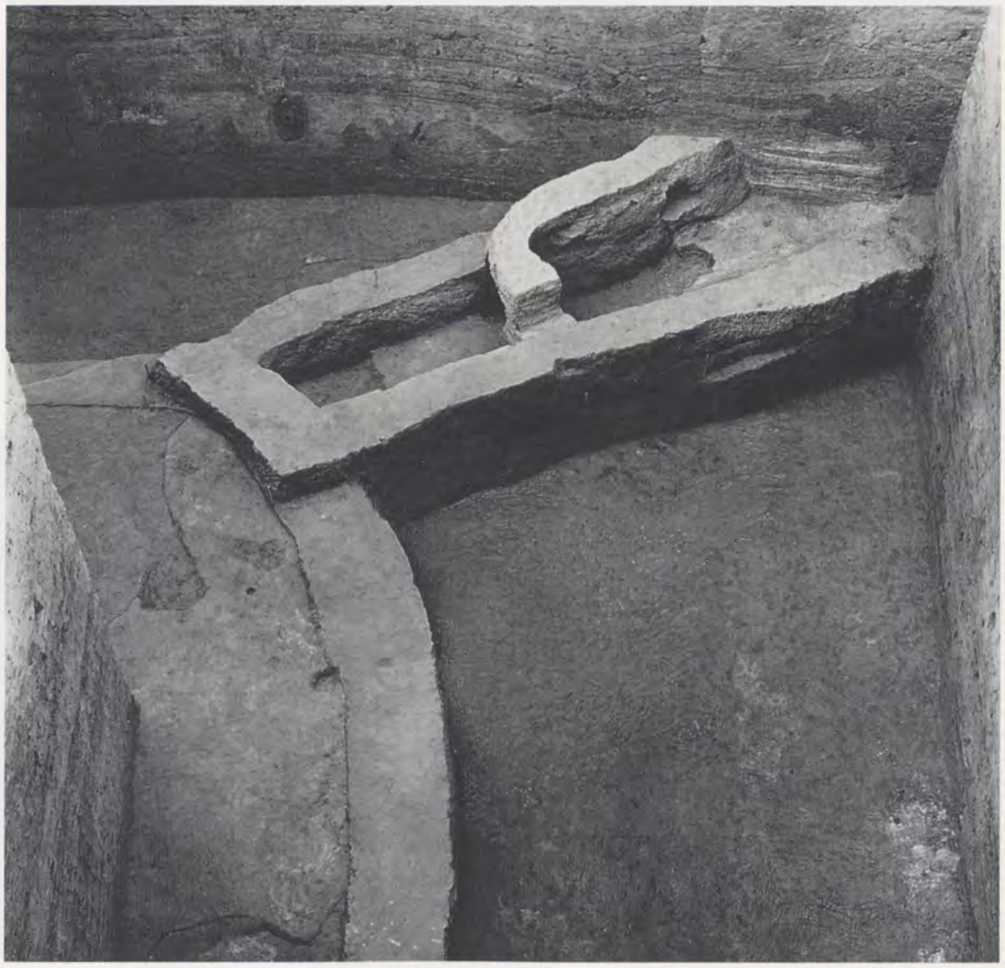
2. In the eastern part of 2 IV/Be was located a mud wall of yellowish-brownish material, 45.0–50.0 cm wide. This wall running in an oval could be followed up in an area of 5.50 by 2.25 m at a height of 16.89–17.28 m. In the inner area, opening towards north-east, was found a layer of yellow sand (PGW material?), height 16.97–17.06 m, in a thickness of 8.0 cm, in which some grooves and post-holes were marked.

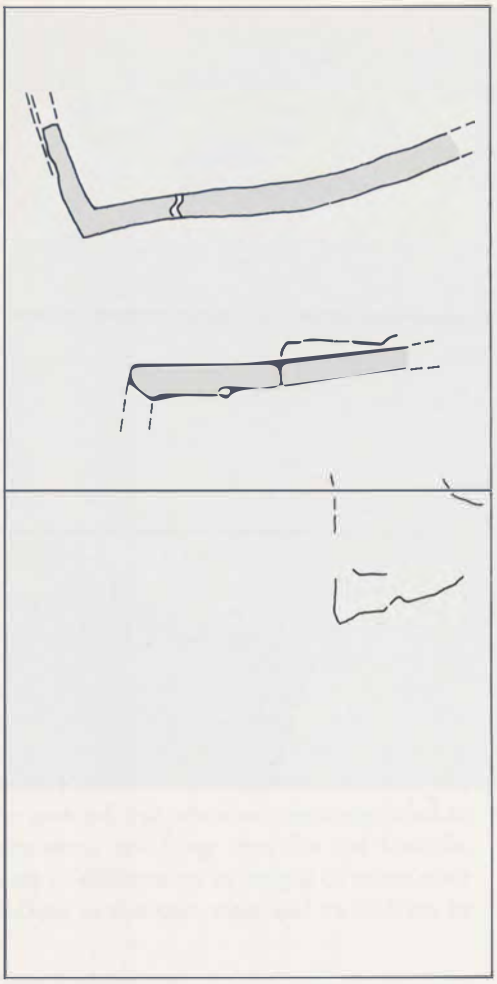
In the southern area, connected with the wall, was found a trough of irregular shape whose walls, made of mud, tapered conically upwards (Fig. 24). Its outer width measured 1.25–1.60 m, the inner width 0.50–0.75 m, the length could be followed upto 4.00 m. The trough was halfway overbuilt by a second trough-like structure, height range of the trough about 17.54–16.99m. The semicircular end of the superstructure ran free over the deeper ground of the trough. Especially this part of the trough, formed by the superstructure, was filled with numerous layers of decomposed residues alternating with loose earth. The bottom of the trough sloped slightly from east to west following the gradient of the ground. In the northeastern corner were found, moreover, the remains of a mud layer.

3. Built upon the outer walls of the structure of Level 35 in the area 2 IV/Cc were found two nearly parallel mud walls of a thickness between 50.0 and 60.0 cm (Fig. 25). The walls, running more or less in eastwest direction, are probably belonging to different court areas. The wall-corners registered in the western part of the field indicate that the court areas have been stretching northwards and southwards respectively. While the walls of Level 35, used as foundations, enclosed a large inner room, it seems as if here the walls enclose a ca 3.0 m wide path of approach from the lower outer area of the swampy ground to the high-placed centre of the habitation.

The differences in height regarding the foundations, 15.30–15.57 m of the northern and 14.70–15.40 m of the southern wall, still indicate, similar to the situation in Level 35, the strong sloping of the level at this period. The western enclosure walls,


23 Mud floor with mud wall and fireplace. Level 34


24 Trough made of stamped mud. Level 34



25 Mud walls in 2 IV/Cc. Level 34

set up higher and existing only in parts now, were founded on the alluvial layers of the slope of the former big ditch, still relatively steep. Small remains of a flooring could be registered north of the southern wall, height 14.84–14.92m. In this region were found some spots of daub on the outer side of the wall. Likewise belonging to this Level 34, probably to a somewhat later phase, is a level of hard mud south of the southern mud wall, height 15.30–15.47m.

Level 33

1. Level 33 could be exposed in 3 I 5.0–10.0/Ca 13.0–15.5 as a hard clay floor with blackish-brown and reddish-grey traces of ashes at an average height of 16.15m. As belonging to this level have to be regarded three longish fireplaces at 3 II 4.0–8.5/Ca 18.0–19.5, height 15.88–16.29m (Fig. 26). The northern one, ca 60.0 × 25.0cm, had a shallow ashpit of a diameter of 60.0cm. The openings of the other two fireplaces lay within the section wall.

2. In the region 2 IV/Be Level 33 is represented by remains of a hard clay-level in the height of 17.30–17.40m.

26 Fireplaces in Level 33

3. In the 9.00 by 19.00m area of 2 IV/Cc the Level 33 is to be identified with three fragments of mud walls. Two of them, situated at 2 IV 5.5–9.0/Cc 12.5–16.0, founded at the height of ca 15.15m and standing upto 15.50m, are remains of the southwest and northeast corner respectively of two houses oriented SW to NE. The structures, consisting of ca 50.0cm wide mud walls, are laid out parallel to each other, separated by a passageway of 1.50m width.

In the northeastern part of the field, at 2 IV 15.80–18.25/Cc 10.75–14.25, height 15.40–16.20m, a straight piece of mud wall is running southwest-northeast, connected with a small spot of hard clay-floor towards south at 15.87m. The height levels of the northern and southern structures show that the differences in height are still prevailing.

Level 32

1. As structures of Level 32 located in 3 I 3.5–10.5/Ca 6.5–17.5 are to be regarded two mud walls meeting nearly rectangularly, height 16.28–17.00m (Fig. 27). The crown of the western wall presented several regular post-holes (?) as well as irregular depressions, the southern outer part demolished by a pit deepened in from a later level and reaching down to 15.82m. The area enclosed by the two mud walls, opening towards NE, showed two different phases of habitation: a hard clay level at the height of 16.41–16.43m and, second, a level of clay sloping slightly towards north, interspersed with sherds, with spots of whitish rotten material and single smaller spots of ashes, average height 16.63m. To this height belongs a small clay level outside the western wall.

In the southwest corner was deposited a heap of rubbish with vessels, sherds, remains of bones etc.; at the end of the western wall a rubbish dump with lumps of clay similar to clay "bricks"

A deep gully embedded in the hard clay ground at 3 I 11.0–13.5/Ca 14.0–15.0, height 16.77–16.79m, is also to be assigned to this level. Running in the north-south direction, it was filled with charcoal and light grey coarse ashes.

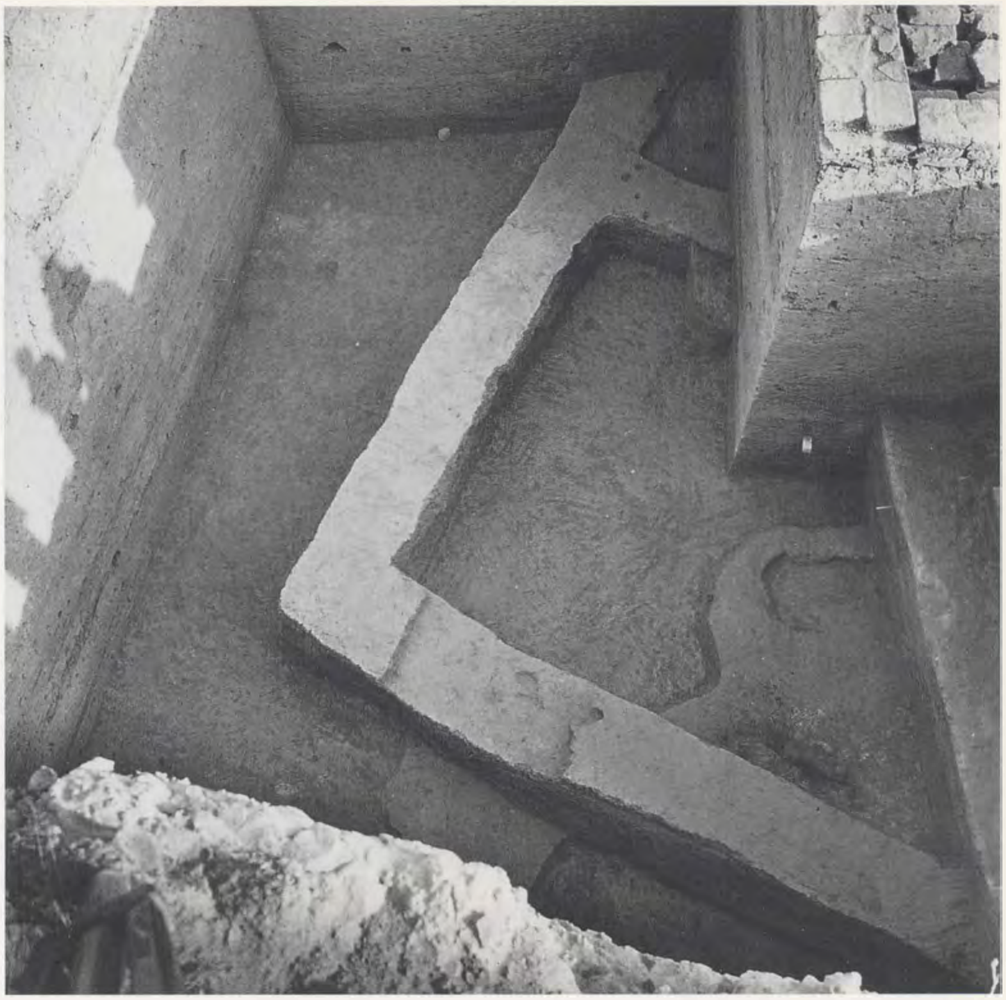
2. As belonging to Level 32 must be regarded a settlement complex at 2 IV/Be, height 17.50–18.10m (lower edge foundation – upper edge wall), which was built of mud, upto 80.0cm wide. Exposed was

27 Mud wall structure. Level 32

the eastern corner of a rectangular building (Fig. 28). The outer walls of dark grey clayey mud running to one another in NW-SE/SW-NE direction surrounded an inner region subdivided by another wall. In the southern inner room, ca 3.10 m wide, excavated in a length of ca 4.00 m, a floor could be exposed at the height of 17.71–17.81 m. Inserted into the floor was a fireplace, size 50.0 × 80.0 cm, the edges reddened by burning. It was filled with whitish grey ashes.

In the room adjoining north, of which just a small part of the southwest corner has been exposed, the height of the floor could be ascertained at 17.79 m.

3. In the area 2 IV/Cc Level 32 was not safely traceable. A number of patches of hard mud level could be exposed, in the north at a height of 16.20–16.40 m, in the southern region at 15.60–16.00 m. As there were no larger structures found along with them, these floor remains could not be assigned to Level 32 with certainty. But a number of terracotta fragments (HUM.TERR. nos. 39; 41) and other finds, among them the two earliest uninscribed copper coins from Sonkh (COINS, no. 4; 5) support this assignment.



28 Rectangular mud structure in IV/Be. Level 32

Level 31

1. Remains of structures and habitational areas of Level 31 were found in 3 I 3.0–12.0/Ca 14.5–19.5 in a height of 16.80–16.95m. Besides the remains of hard clay levels, partly covered with sherds, partly blackened by burning, with shallow gully-like depressions, a wall-corner of lumps of mud-bricks has to be pointed out here specially (Fig. 29). The wall-remains, height 16.67–16.88 m, about 2.00 m long and opening towards NW, consist of lumps of mud of different sizes but rather uniform thickness, ca 5.5cm. However, it cannot be presumed that they have been prefabricated and dried up in advance but appear to have been set more likely in wet condition.

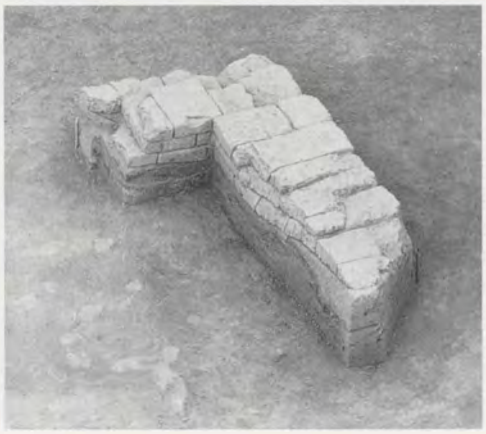
2. In the area 2 IV/Be the Level 31 is represented by a mud wall construction which is set up directly on the structures of Level 32 (Fig. 30). In contrast to the clayey dark grey material of the preceding level, the walls of this construction consisted of yellowish-brownish, slightly sandy clay. The height of the lower edge of the foundation conforms with that of the crown of the wall of Level 32. The upper edges of the preserved walls of Level 31 range between 18.36 and 18.52 m.

The wall running SW-NE was extended in this time towards south, bordering a connecting court area. As no older wall could be used as foundation for this court wall, connected with a joint, a compensating layer of hard, dark grey clayey mud, about 15.0 cm thick, was laid at first to equalize the difference in the height. On it, the court wall was erected corresponding in its material to the walls of the house.

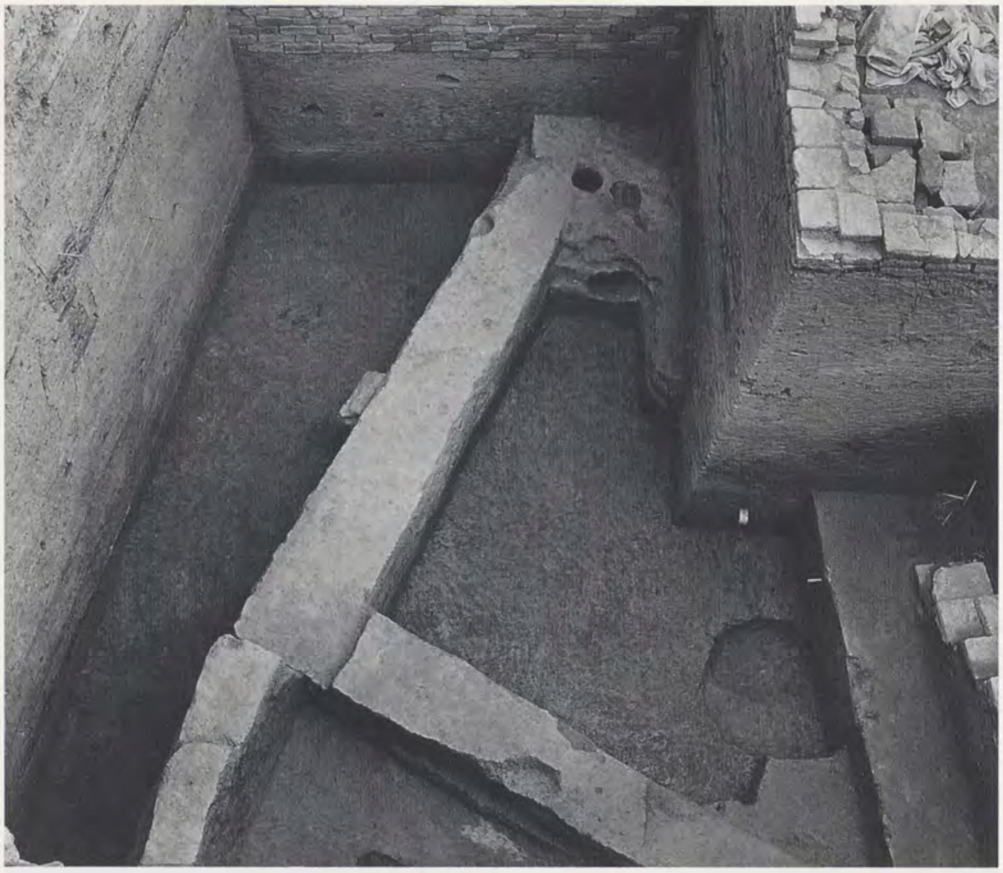
West of the outer wall was located a mud level with greyish white remains of ashes and sherds, height 18.08–18.30, its level corresponding to that of the southern court room, 18.09–18.18 m. Before the western wall lay just one rectangular mud-brick, reddened by burning, the remains of a fireplace probably.

Inside the building two levels of habitation could be ascertained: 1. Height level 17.92–17.97 m, hard mud with rotted remains of plants and ashes; 2. hard mud, 18.10 m in the average. Remains of a mud-plaster of dark grey clayey material were found on the inner side of the southwestern corner of the room.

Of special interest was the furnace located in the northern corner of the room. The wall, ca 50.0 cm wide in the phase of Level 32, had been broadened to ca 1.00 m (Fig. 31). An oval opening, situated on the floor-level, was connected by a ca 60.0 cm long horizontal conduit with a round "chimney", diameter 25.0 cm, which, integrated into the mud wall, served as flue. A large quantity of ashes, mostly grey but also partly reddish, was found in and by the fire-opening. As far as known this is up to now the only documented occurrence of a



29 Mud-brick structure. Level 31



30 Mud wall structure in 2 IV/Be. Level 31

flue integrated into a mud wall structure of this period.

In 2 IV/Cc the Level 31 can presumably be identified with patches of hard mud level at the height of 16.16–16.39 m in the southern area and with two fragments of an obviously very long mud wall in 2 IV 11.50–17.75/Cc 13.00–19.25 and a smaller wall fragment in the north-western corner. The preserved parts of the wall running from SW towards NE are founded at 16.02–16.21 m, standing up to 16.32 m. The length of the fragments is 2.75 m and 4.80 m respectively, the width 50.0–55.0 cm. Judging from a patch of floor preserved along the longer fragment, the inner area enclosed by the wall was lying southeast of it. The not preserved southwest corner of the structure lay presumably at the point 2 IV 11.25/Cc 12.30.

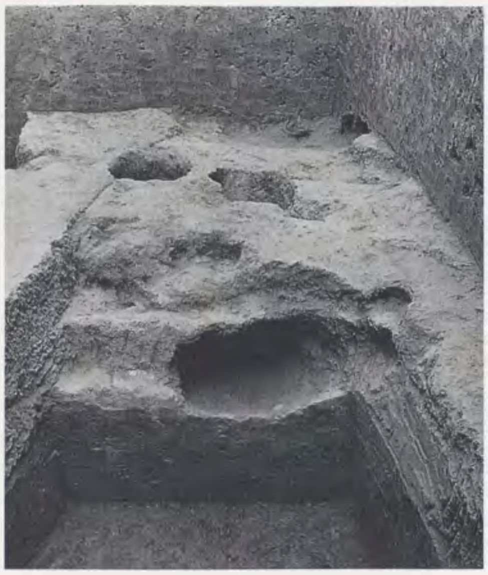
Level 30

1. This habitation level has been exposed in 3 I-II 3.0–11.0/Ca 8.0–18.0 in two hard mud levels with sherds, brick-rubble from fireplaces as well as small pieces of baked clay and traces of ashes. At the western edge of the upper habitational phase, height 17.18–17.25 m, lay whitish layers of decomposition.

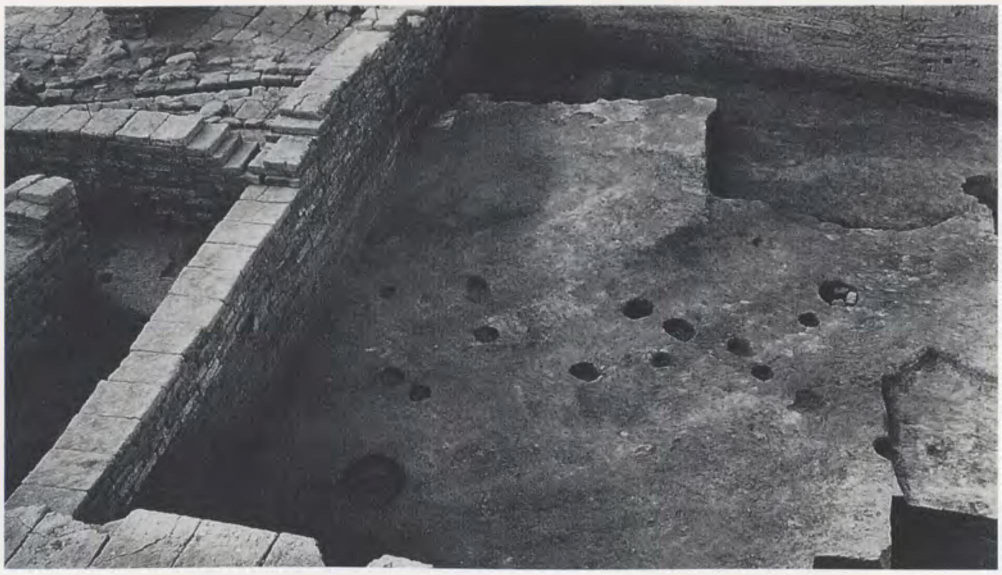
The middle part of the lower, first habitational phase showed a slightly curved stripe of post-holes nearly in north-south direction of different diameters and depths (Fig. 32). In a pit of about 40.0 cm in diameter, exposed at the northern end of this section, were found three bigger pieces of baked bricks, the lowermost appearance of baked bricks in Sonkh at all. In the southern profile a baked brick well-stone of the size 42.0 × 30.0–20.0 × 6.5 cm was found and near to it, the remains of another one, at the height of 17.26 m.

2. In the region 2 IV/Be the northern corner of a building or of a court enclosure belonging to Level 30 could be exposed (Fig. 33). The westside of this building was erected directly on the court wall of Level 31, not to be separated from that of the older level with regard to the yellowish mud material. The axis of the superstructure is however turned more towards NS and its walls are considerably narrower than those of the older structure, ca 40.0–50.0 cm. The north wall, slightly inclined in the upper part towards north, consisted of light grey, more clayey mud in contrast with the west wall. It was placed subsequently against the westwall, the different materials marking themselves clearly at the joint.

The west wall projecting beyond the corner of the structure breaks off at the



31 Detail of furnace in fig. 30



32 Mud floor with post-holes, 3 I/Ca, Level 30

33 Corner of a mud wall building in 2 IV/Be, Level 30

very place where in Level 31 the court wall was placed with a joint to the former building. It remains unclear how far a probable wall followed that of the older level.

In the enclosed area the height of the mud-levels covered with traces of ashes lay at 18.45–18.50 m; the outer area, clay ground with ashes and sherds, sloped towards north from 18.71 to 18.41 m.

3. In 2 IV/Cc the remains of Level 30 are restricted to a level of hard mud at the height of 16.46–16.54 m.

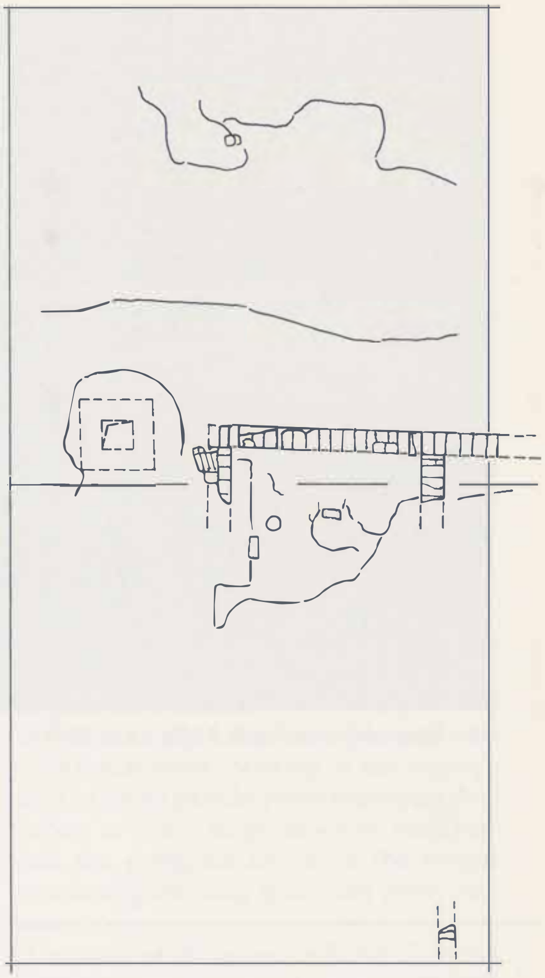
D. THE PHASE OF THE MUD-BRICK CONSTRUCTION

If in the preceding Levels the structures were predominantly built in compressed mud, the situation changes abruptly with Level 29 in the whole of the excavation site.

Reaching the ground above Level 30 there were found in all the areas in which structures of the Levels 29 and 28 came to light remains of settlements, farms etc. which had been constructed out of prefabricated mud-bricks. It is true that already in deeper levels smaller parts of structures had been found which were not executed homogeneously in stamped mud, though. But in such cases they were mostly parts of walls in which the mud was put in some brick-like shape (cp. Level 31). However, uniform sizes as in Levels 29 and 28, waiting to be discussed now, were out of question. Single finds of baked brick fragments or fired bricks of special size (well-stones and others) allow the conclusion that already at the beginning of Level 29 fired bricks were used for special constructions whereas the majority of the houses was constructed of mud-bricks now, probably on economic grounds.

Significant is the fact that the structures of the Levels 29–28, erected in mud-bricks, are not only of partly identical layout but that they anticipated the structures of single buildings as well as the general alignment of the settlement of the Level 27.

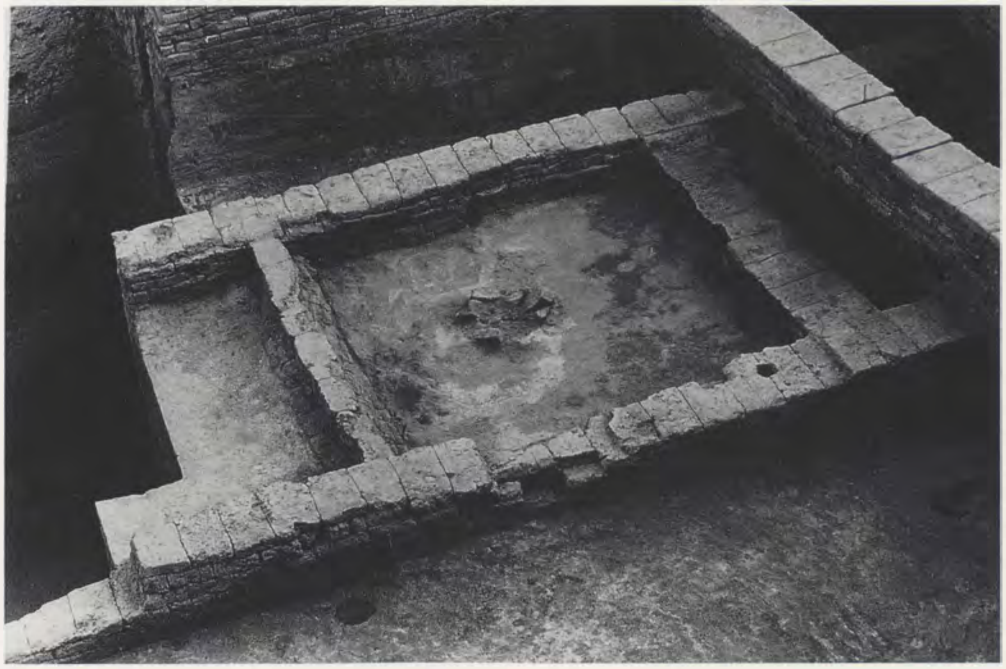
The time of the mud-brick constructions in the Sonkh mound is the formative phase of the early "urban" settlement. If the structures of earlier levels did not indicate any primary principles of town-planning this changed now with the time of Level 29. Surprisingly, this coincides with a turning point of the political and cultural history in this part of India because the Levels 29 and 28 are contemporary with the beginning of the Mitra Dynasty of Mathura.



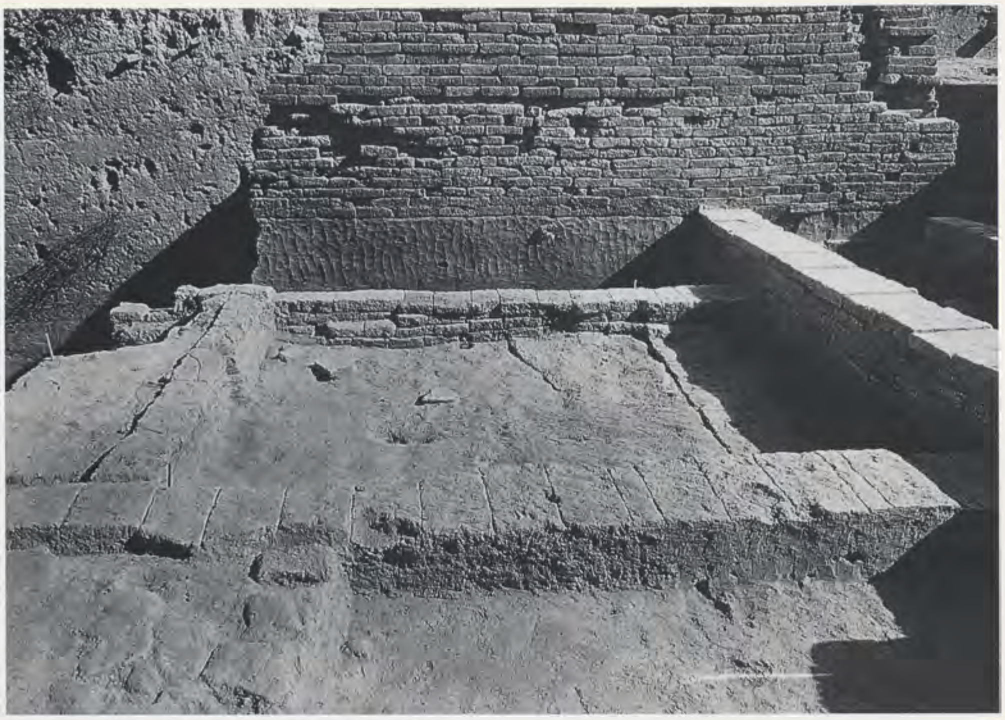
35 Structures of Level 29 in 2 IV/Cc

Level 29

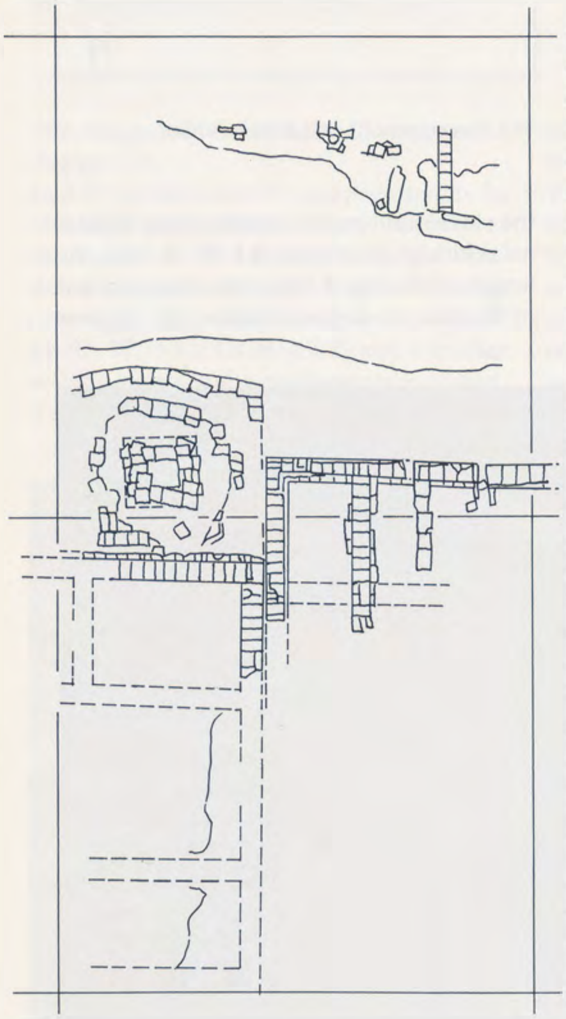
1. Of the structures of Level 29 was preserved in 3 I 3.5–10.2/Ca 6.5–17.0 a row of three rooms in the north-south direction (Fig. 34). The southern room could be recorded only to a small extent, the northern room was for the most part demolished by the moat dug in the time of Level 4 so that the extension towards north is lost. External width of the rooms is 3.00–3.15 m, the length of the row 5.75 m, the deepest point of foundation lay at 17.26 m, the highest



34 Remains of a house built in mud-bricks, 3 I/Ca, Level 29



36 Mud-brick structure in 3 I/Ca, Level 28



37 Structures of Level 28 in 2 IV/Cc

point of the walls at 17.80 m. The masonry consisted mainly of mud-bricks of a medium size of 43.0 × 23.0 × 8.0 cm.

The southern room proved to be the kitchen, the fireplace with mud wallings full of ashes was found directly between the room wall and the profile of the trench. The middle room, inner dimensions ca 2.20 × 2.20 m, was used as a storeroom. Evidences of this were the baked brick fragments arranged in a circle of ca 50.0 cm diameter, serving obviously as support for a big storage jar. The ground showed in some places a mortar-like layer of brick-powder on mud as in the outer room. The middle room opened towards the west by a ca 70.0 cm wide door-opening, the treshold strongly worn down, on a court area in a height of 17.52–17.64 m sloping slightly towards north. The surface of the court consisted of mud with spots of mortar of brick-powder, a few sherds and smaller spots of ashes. The height level of the three rooms ranged between 17.62 m in the south and 17.39 m in the north, following the terrain.

2. In the region 2 IV/Be a hard mud level of the height of 19.05–19.13 m is to be assigned to the Level 29. The floor of partly black, partly red fired mud was covered with black and reddish-white ashes and sherds of a large vessel broken into pieces. A large and a small pit from higher levels were cutting through the floor.

The axis of the mud-brick wall, height 19.08–19.57 m, running in the WE direction corresponded in its course nearly to that of the masonry of 3 I/Ca and is comparable also in the size of the bricks to that of the row of rooms exposed there.

3. The floor of Level 29 in the area 2 IV/Cc was divided in a northern and a southern part (Fig. 35). The northern patch has been exposed at a height of 16.65–16.86 m, the southern part of the floor extended at an average height of 16.95 m. Also preserved were mud-brick walls of the north-west corner of a house forming the remains of two rooms. The structure consisted of a 5.75 m long northern wall projecting from the eastern profile in nearly east-west direction at 2 IV 10.50–11.00, ending in 2 IV 10.75–11.25 where scanty remains of the western outer wall were joining rectangularly. A further fragment of a wall met the long northern one at 2 IV 10.60/Cc 8.75–9.25 thus forming a western room measuring 4.00 m on its preserved northern side and indicating another room to the east of which only the north-west corner remained. The walls were founded at a sloping height of 16.63–16.82 m, standing up to 17.02 m. The bricks measured 43.0 × 23.0 × 8.0 cm. The whole structure resembled the one in 3 I/Ca.

To the west of the house a brick-built well of Level 28 was cutting the ground.

Level 28

1. The structures of Level 28, exposed in 3 I 2.0–10.0/Ca 10.0–17.0, closely followed in direction and layout those of the rooms of Level 29. The walls of the older house were used as foundation, however, between the mud-brick courses of the two levels a thin mud layer could be noticed. Slight differences in the measurement of the structures were conditioned by the different sizes of the mud-bricks used: for the western wall mainly such of 45.0 × 23.0 × 6.0 cm, for the eastern one shorter but otherwise identical bricks of 35.0 × 23.0 × 6.0 cm (Fig. 36).

The external width of the rooms was about 3.00 m. A hard mud-floor with whitish remains of rotten material was found in the outer room. To the west was exposed a court ground with the remains of a mud-brick-flooring and parts of fired bricks at a height of 17.95–18.00 m. As with the comparable structure in Level 29 the extension towards north is lost due to the large moat dug in the time of Level 4.

The remains of the mud-brick house in the area 2 V 18.5–3 I 3.0/Cb 4.5–9.5, outer dimensions ca 3.05 m, proved to be oriented parallel to the above structure. The walls of the construction in the north, for the most part demolished by the just mentioned moat of Level 4, were of unusual thickness, 60.0 cm on an average, and were built of mud-bricks of very different sizes. At the south-east corner were added two short remains of walls. The wall in extension to the southern wall consisted of mud-bricks of the size 42.0 × 23.0 × 6.0 cm.

2. In the area 2 IV/Be was found a mud-brick wall of Level 28, made of quite differing sizes of bricks, width ca 40.0 cm, height at 19.20–19.34 m, in connection with a level of yellow mud, 19.20–19.29 m. The axis of the wall ran parallel to those of the structures of this level recorded above. In the north-eastern corner a pit was sunk about 45.0 cm into the soil, full of ashes and sherds, diameter ca 1.10 m.

3. Level 28, in the area 2 IV 6.00–18.50/Cc 0.50–10.50, is to be regarded as a kind of direct scheme for the later Level 27. The ca 7.00 m wide access road from the east was now clearly marked, height level between 17.12 and 17.00 m, the middle of the road eroded by the flow of water. On this road, one of the two Gomitra copper coins was found (COINS, no. 55).

Also the southern border of the main road was now completely developed, consisting of the remains of two large buildings (Fig. 37). The eastern structure, built in mud-bricks, seems to have formed the northern section of a larger block, unfortunately destroyed by the moat of Level 4. A large gully, covered with burnt bricks, drained unto the street level.

The western structure in burnt bricks, set back to the south about 3.20 m, in the earlier phase only partly preserved, could be reconstructed as the eastern row of rooms of a larger block extending into the unexcavated area. The later phase showed remains of, at least, three rooms, extending to about 8.50 m in south-north direction, height of the structures unearthed between 17.00 and 17.80 m.

The most astonishing feature of Level 28 was, however, a large rectangular, nearly square public well situated in the corner formed by the two blocks opening to the north, to the road, erected on a kind of platform, about 4.00 by 4.00 m, enclosed by a partly stepped brick socle. Height of the platform and the partly preserved brick flooring at about 17.60 m on an average.

The well, upper level at about 17.80 m, was built in burnt bricks of the size 40.0–41.0 × 26.5–27.0 × 7.0 cm, inside dimensions ca 0.70 × 0.65 m. The groundwater level was reached at a height of 10.65 m (02/1974), the lower portions of the wall still reaching down, below 10.15 m. In a later phase, the upper part of the well shaft was repaired or heightened. Remains of a small mud-brick wall, set against the northern wall of the adjoining block may indicate the construction of a lean-to shelter as a protection of the well.

E. THE BEGINNING OF THE BAKED BRICK CONSTRUCTION IN THE LEVELS OF THE MITRA PERIOD

With Level 27 we enter the phase of baked brick constructions in the mound of Sonkh. Although mud-bricks were still in use, the majority of buildings were now erected in baked bricks. Mud-bricks were reserved for minor structures and perhaps for houses of the less wealthy. From the viewpoint of town planning the Levels 27 to 25, including may be the baked brick parts of Level 28 in 2 IV/Cc, are forming one homogeneous phase, not only based on corresponding architectural features but also proven by the related finds.

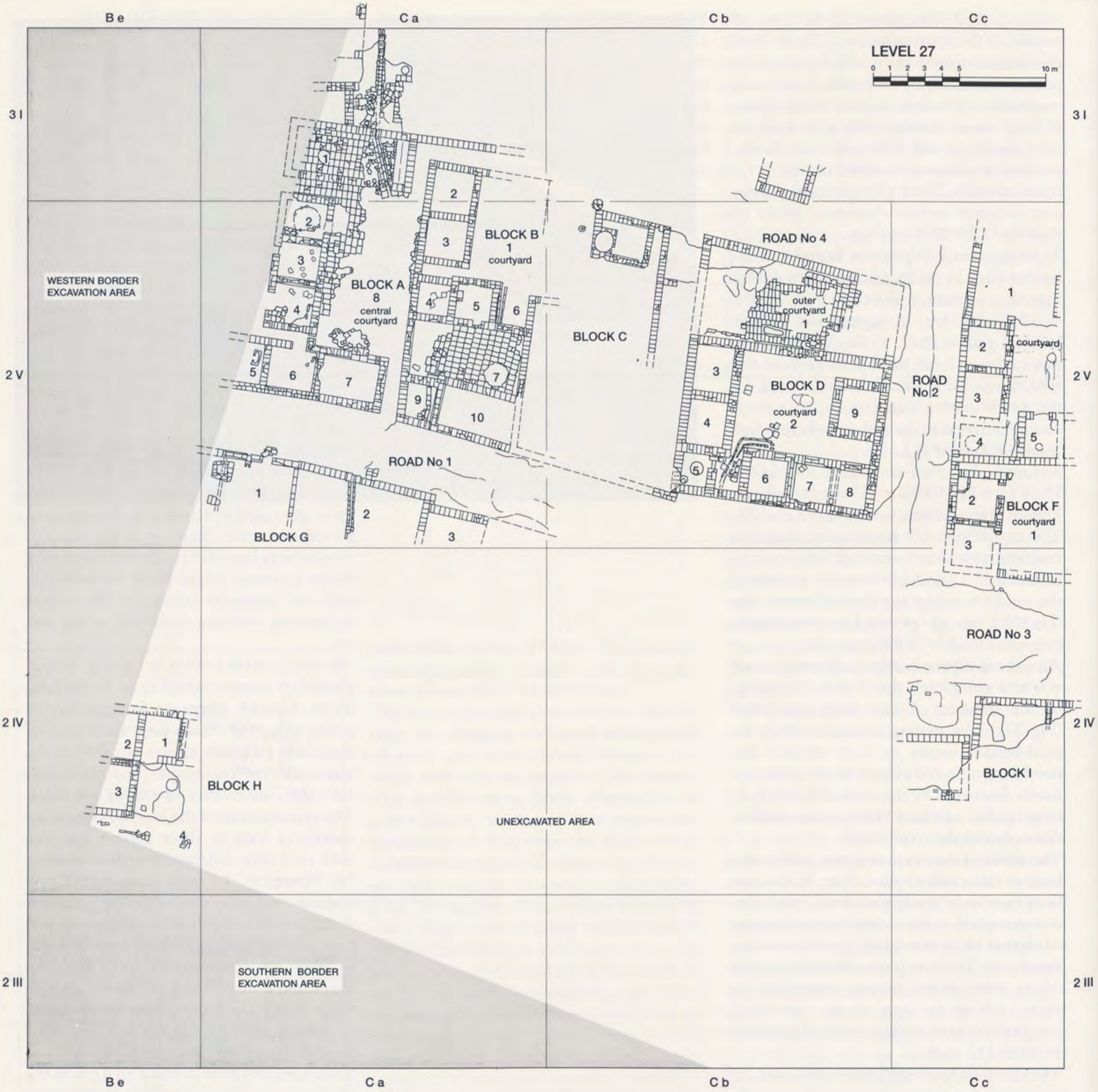
Level 27

The Level 27 is not only the oldest horizon built mainly of baked bricks but, at the same time, a model of well-contrived and up to the smallest detail well-planned constructional units. Striking is the conception of broad parallel roads providing easy access to every single block of buildings and the congenial layout of the houses combining dwelling space and utility sector.

The outfit of the houses in Level 27 shows a comfort never attained again in the later levels of Sonkh. There are, for instance, the public as well as private ring-wells made of terracotta elements always situated in the south-west of the houses, indicating hereby the continuance of traditional rules. The arrangement of the houses, consisting mostly of two or three rooms, covered with roof-tiles, followed also distinct rules but offered at the same time always new and convincing solutions. On the one hand it was possible to group several houses one after the other, parallel to the road, in order to attain a continuous change of dwelling space and court (Block B), or to arrange them along the sides of an inner court, therewith anticipating the coherent constructional unit of later times (Block D).

Structures of Level 27 came to light in the extensively excavated area in 2 V/3 I-Ca/Cc as well as in the plots 2 IV/Be and 2 IV/Cc. The correspondance in the layout with the remaining parts of Level 28 in 2 IV/Cc leads to the conclusion that Level 27 in part perhaps continued structures of Level 28, but in its improved technology and its development created a model of settlement which represents an architectural and social peak.

The floor-level of the occupied area of Level 27 slopes north from 2 IV/Be towards 3 I/Ca from 19.60 m down to


LEVEL 27
0 1 2 3 4 5 10 m
Be
Ca
Cb
Cc
3 I
2 V
2 IV
2 III
WESTERN BORDER EXCAVATION AREA
SOUTHERN BORDER EXCAVATION AREA
UNEXCAVATED AREA
BLOCK A
8
central courtyard
BLOCK B
1
courtyard
BLOCK C
BLOCK D
courtyard
2
outer courtyard
1
BLOCK F
courtyard
1
BLOCK G
BLOCK H
BLOCK I
ROAD No 1
ROAD No 2
ROAD No 3
ROAD No 4
courtyard

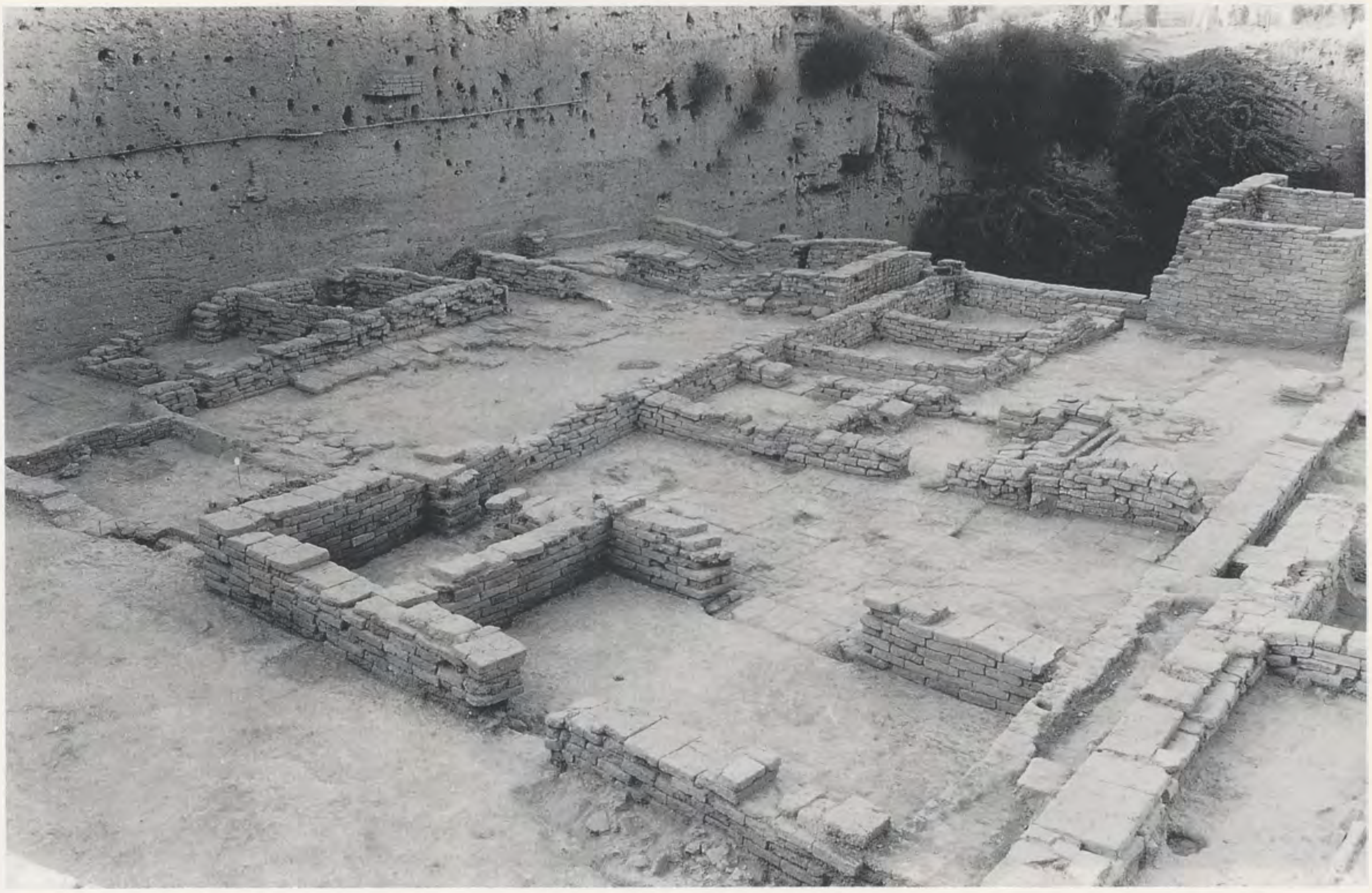
18.00 m, and towards 2 IV/Cc in the east to 17.50 m. The walls unearthed in this region were rising partly to a height of 0.50 m above the floor level.

The alignment of the housing area orientates itself by the main road no. 1 running approximately in west-east direction. This 3.50 m wide road slopes from 18.30 m in the west to 17.57 m in the region 2 V/Ca-Cc and is crossed in Cc by the again 3.50 m wide road no. 2.

The west-east road no. 1 continues in 2 IV/Cc widening now to 7.00 m, thus indicating that this stretch most probably was part of the approach road from the east, as recognizable already in the construction of Level 28. The public well of Level 28 in 2 IV/Cc, perhaps still in use in the first time of Level 27, sufficiently adds to the assumption that this area was some sort of a public meeting place.

Whether or to what extent the open space around the Apsidal Temple no. 1 was already existing or whether one has to expect here a crossing of roads could not be ascertained.

In the excavated area of Level 27 altogether nine residential blocks have been located. North of road no. 1 are situated Blocks A–D occupying a depth of ca 15.00 m. They are bounded in the north by road no. 4. South of the road no. 1 remains of mud-brick walls have been found, per-



38 Level 27: Blocks A and B from south-east

haps of a Block G. To the east of road no. 2 follow the Blocks E and F while to the south of the road in 2 IV/Cc remains of the Block H came to light. An indication of a ninth Block I is given in scanty remnants of structures in 2 IV/Be.

Block A

As far as excavated the Block A consisted of seven rooms arranged along a rectangular inner court extending 5.0 × 9.5 m south-north. The access to the block leads from road 1 through a narrow, 0.8–1.0 m wide lane in to the court. The complex of rooms seems to have had connection towards west where the excavation area ends. In the north-east corner opens another path of access around the corner of Block B, perhaps meeting road no. 4 (Fig. 38).

The most remarkable part of Block A is the hall in the north measuring 2.50 × 6.50 m in the clear. It opens towards the south and is furnished with a carefully laid baked brick flooring. The floor consisted of baked bricks of the size 43.0 × 30.0 × 7.0 cm and 42.0 × 31.0 × 7.5 cm, laid in mortar made of brick fines. To the right and left of a brick pillar there is an opening each 1.90 m wide leading to the inner court. On the right side of the hall was found a socle of hard clay, obviously the remains of a former bench. The extensive paved area of the court necessitated the laying out of a drainage channel. Most probably the channel was open in the courtyard; in the hall itself, however, which it crossed slightly diagonally, it was ingeniously embedded in the baked brick pavement and covered with bricks. It drained towards the north through a breach in the northern wall of the hall. Next to the channel immediately behind the back wall stood a large soakage jar embedded in the earth and covered with brick. In this outer area remnants of another structure and of a paved floor are the outernmost witnesses of this level at the verge of the large moat dug in from Level 4.

In the west of the court area is a group of three rooms (2–4) nearly equal in size measuring 2.2 × 2.3/2.4 m. They are separated from the hall and the southern chambers by a sort of lane each, paved and approximately 0.90–0.95 m wide, which lead to the court from the west. The northernmost room has its approach from the inner court, the other two are to be entered from the western side. In the south the block is completed by the group of store-rooms (5–7) of different size (3.25 × 2.30 and 2.60 × 2.30 m).

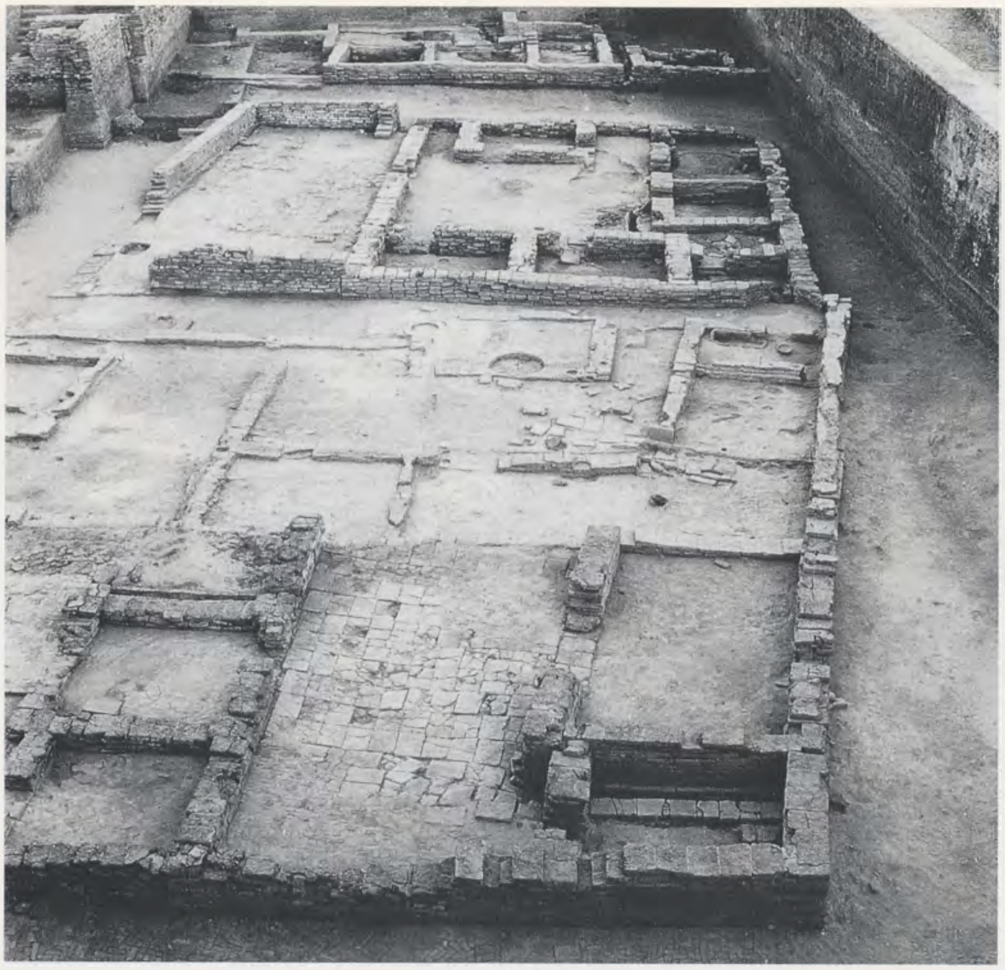
The court is bounded in the east by a long closed wall without any door-opening being the partition wall between Block A and B. Immediately in front of this wall were found heaps of roof-tiles on the floor of the court.

The sizes of the bricks used in the walls of Block A measured

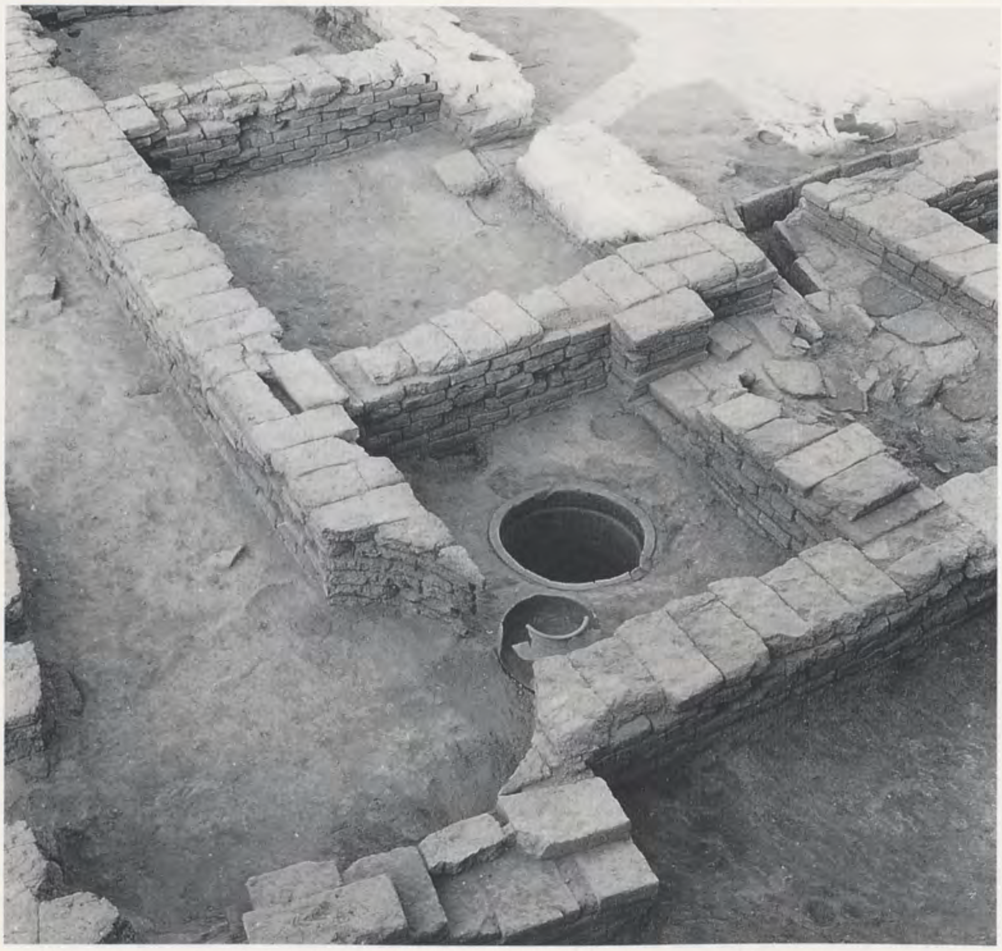
37.0 × 24.0 × 6.5 cm
38.0 × 23.0 × 7.0 cm
43.0 × 26.0 × 7.0 cm
43.0 × 29.0 × 7.0 cm
44.0 × 29.0 × 6.5–7.0 cm
44.0 × 30.0 × 7.0 cm.

Block B

Block B measures ca 7.20 × 15.25/16.00 m and consists of seven rooms which are



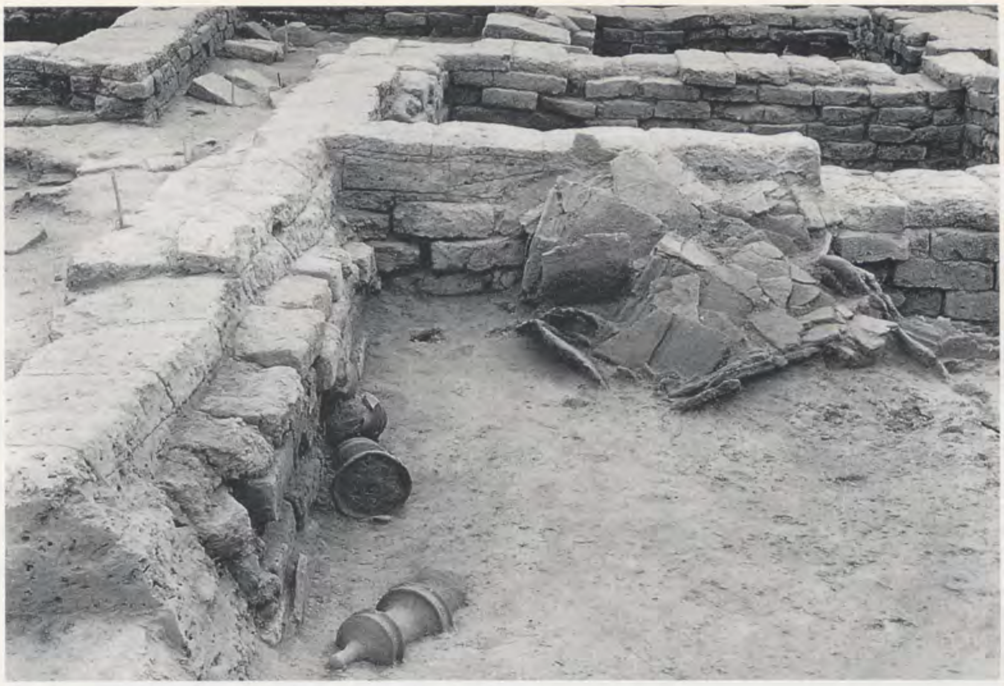
39 Level 27: Blocks B–F from west



40 Level 27: Ring-well in Block D

grouped along two inner courts. While the access to Block A leads through a narrow lane, Block B is entered through room 10 which serves as a passage on to the paved first court (Fig. 39). From here one reaches room 9 on the road side and the central group of rooms 4 to 6 north of the court. Room 5 presumably permitted the access to the northern court which is flanked by two rooms of equal size (2, 3) arranged along the closed western wall. Room 6, obviously open to the upper court, is provided with a short drain.

While Block A, especially its hall, had been erected of bricks of averagely 43.0 × 29.0 × 7.0 cm, Block B was, strangely enough, erected with bricks measuring 37.0/38.0 × 24.0 × 7.0 cm. Both sizes seem to have been used side by side but nearly never mixed. In this connection one should not forget the additional variety as e.g. in Block D with its ca 48.0 × 24.0 × 7.0 cm bricks.


41 Level 27: Roof-tiles and Pinnacles in Block D

Block C

In the space following east of Block B, denoted here as Block C and measuring ca 9.2 × 15.5 m, only scanty remains of one room and a long wall are preserved which do not permit a reconstruction of the layout. Only in a later phase of use some structures in mud-brick were found, but of minor appearance.

Block D

Block D measures ca 11.75 × 15.0/13.75 m and is surrounded on three sides by the roads no. 1, 2 and 4.

While Block A and B could be entered through a narrow lane or an entrance room, the corner-Block D surprises by a new conception. One enters the house in the north through an 11.00 m long and 4.50/5.30 m wide forecourt which follows in the north the alignment of road no. 4 but is bounded in the south by the walls of the residential quarter arranged rectangularly with the roads 2 and 1. At both sides of the paved middle part of the forecourt a few remains of former structures, presumably sheds, are preserved.

By a door, the door hinge stone still in situ, one enters the inner court (2) enclosed by houses with separate access to each room grouped to the west, south and east. This nearly square complex measures 11.75 × 9.25 m and consists of seven rooms of approximately equal size, i.e. 5.0–5.5 sqm in the clear, with the exception of room 5. This smaller south-west corner room, 1.5 × 1.9 m, contains a ring-well (Fig. 40). In a corner stood a water jar. The well consists of 36 terracotta rings one resting on top of the other but merging into one another now. The rings are ca 19.5 cm high. The outer diameter of the well is 82.0 cm, the inner 72.0 cm, its depth 6.30 m. Unlike the terracotta ring-well in Level 26 (3 I/Ca), which is situated in a public well house, this certainly private well served for the water supply of Block D alone.

As the floor of this complex slightly slopes towards south, a gully was built in the anteroom to avoid a contamination of the well by rain or waste water pouring in. From this point of view it is interesting to see that the front wall of the well room is clearly set back, most probably to get a larger roof projection against rain and heat.

In several rooms have been found remains of the collapsed roof construction consisting of roof-tiles, ridge tiles and pinnacles (Fig. 41).

Contrary to the other blocks discussed so far this Block D has been erected completely of baked bricks of a relatively uniform longish type of the sizes

48.0 × 23.5 × 7.0 cm
48.0 × 24.0 × 6.5–7.0 cm
48.0 × 24.5 × 6.5–7.0 cm
49.0 × 24.0 × 6.5 cm
50.0 × 23.0 × 7.0 cm.

It might be an indication that this complex has been built according to a clear plan in one extreme effort and in a short time.

In the inner court, just before room 6, was found a large storage jar embedded in the ground. In addition, there have been located traces of fireplaces in both the courts of the complex. The middle room of the southern row contained a fireplace built of bricks, identifying this room as the kitchen.

Blocks E and F/I/H

To the east of road no. 2, i.e. on the eastern verge of the excavated area, are situated the unearthed parts of the Blocks E and F. The Block E shows, as far as recognizable, a similar layout of rooms as Block D. Here again a ring-well has been built in the southwest corner room for the private water supply. But contrary to the well in D terracotta elements were used only in the upper part for ca 2.00 m, the lower part being executed as a tapering mud-well only. This well was in use up to the latest phase of Level 27 and even in the beginning of Level 26, when the well shaft, narrowing upwards, was raised by new layers of baked bricks, according to the rising height of the floor level.

To the south follows the more modest looking construction of Block F. One should however not exclude the possibility that this complex was laid out reaching further east extending into the unexcavated area. The drainage took place by a 0.50 m wide gully leading on to road level, being connected with the drainage of Block E running in front of the well room. The outer walls of the rooms adjacent to the gully are protected against decay by roof-tiles placed upright into the drain.

H. 5.5 cm. L. 7.8 cm. Colour: brown. No. So III A 3230.
FS. 2 V 17.5/Cb 0.8, H. 18.05 m. Mitra. L.27
Note: More fragments of this type of toybird from Mitra levels registered as find nos. So III A 2974; 3113; 3283; 3338; 3441.

59. Fragment of a toybird pierced for wheel-axle. Short rounded beak and tufted head. Perforation for fastening a string, perhaps indicating eyes also.
H. 4.5 cm. L. 9.2 cm. Colour: brown. No. So III A 3334.
FS. 2 IV 11.4–12.85/Cc 5.0–9.5, H. 17.70–17.55 m.
Mitra. L.27
Note: One more specimen of toybird of same type as no. 59 registered as So III A 2972.

60. Mutilated head of bird with pointed beak. Perforation for fastening a string.
H. 3.3 cm. Colour: brown. No. So III A 3296.
FS. 2 IV 15.5–17.0/Cc 0.5–9.5, H. 17.50–17.35 m.
Early Mitra. L.28/27

61. Head of a bird with crested head. Eyes perforated.
H. 3.2 cm. Colour: grey. No. So III A 3166.
FS. 2 V 4.03/Cb 8.19, H. 17.70 m. Mitra. L.27

62. Head of an animal. Lower jaw (?) broken off. Eyes applied in shape of flat discs.
H. 2.8 cm. Colour: brown. No. So III A 3677.
FS. 2 V 6.9–10.7/Cb 14.0–16.5, H. 18.00–17.95 m.
Mitra. L.27

63. Head of an animal with perforation for the eyes. Applied ears. Small hole in tip of mouth.
H. 4.3 cm. Colour: brown. No. So III A 2988.
FS. 2 IV 4.5/Be 19.0, H. 19.35 m . Early Mitra. L.28

64. Fragment of two-humped camel. Mouth and left hind leg broken off.
H. 12.4 cm. Colour: red. No. So III A 2373.
FS. 3 I 1.4/Cb 4.5, H. 18.35 m. Mitra. L.27/26
Note: One more specimen of two-humped camel registered under So III A 3670 (L.26)

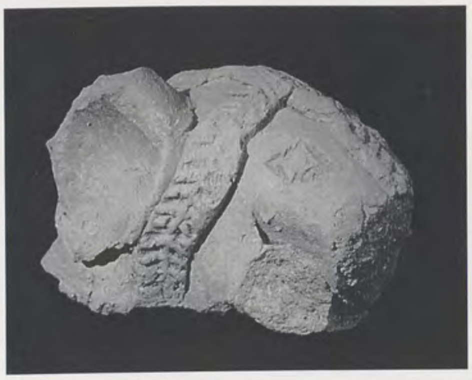
65. Uplifted head of a camel with slightly opened mouth. Pierced eyes framed by a lozenge.
H. 3.0 cm. Colour: brown. No. So III A 2953.
FS. 2 IV 7.7–10.2/Be 16.4–19.0, H. 19.52–19.40 m.
Early Mitra. L.28/27

66. Head of an animal (camel?). Plain neck and head with small slits as eyes and applied small discs as ears. Mouth slightly open.
H. 2.7 cm. L. 3.5 cm. Colour: red. No. So III A 3663.
FS. 2 III 13.0–17.1/Cc 6.65–8.15, H. 18.63–18.50 m.
Mitra. L.26

67. Fragment of a camel. Head and legs missing. Between hump and tail a bulgy band covering the rear part.
H. 3.7 cm. L. 6.6 cm. Colour: brown. No. So III A 2604.
FS. 2 V 14.0–3 I 0.5/Ca 16.8–18.0, H. 18.90–18.65 m.
Mitra. L.26

68. Mutilated animal (deer?). Legs broken off. Upturned horns (?), elevated eyes.
H. 4.4 cm. L. 5.7 cm. Grey. No. So III A 3654.
FS. 3 I 1.5–1.9/Cb 18.5–19.4, H. 18.10–17.95 m.
Mitra. L.27

69. Boar (?) with prominent head and short legs. Eyes punched as holes, nostril and mouth marked in tip of muzzle. Ears broken off.
H. 5.9 cm. L. 9.0 cm. Colour: red. No. So III A 3234.
FS. 2 III 18.5–19.5/Cc 0.5–9.1, H. 18.90–18.60 m.
From Level 26, but found on the edge of a ditch, therefore a slightly later origin possible.



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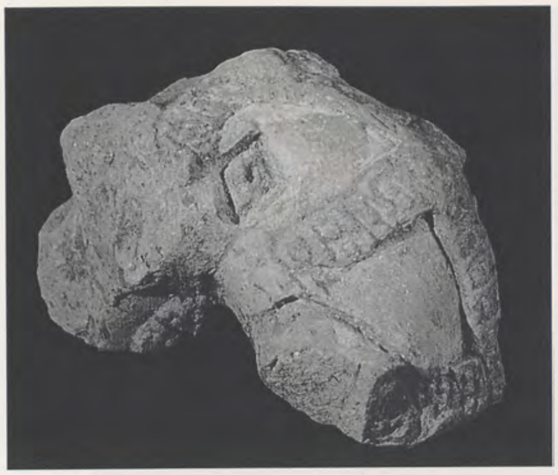

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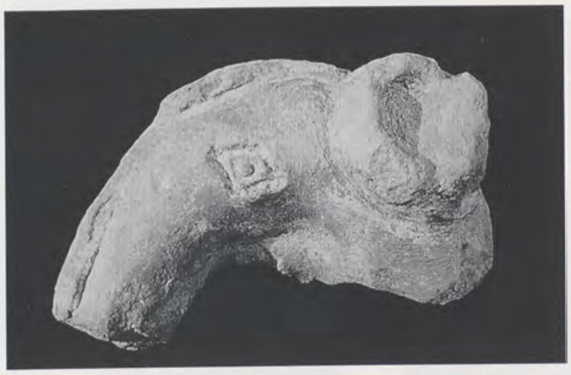

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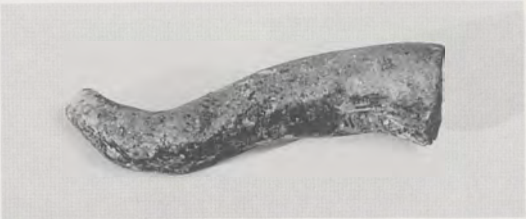

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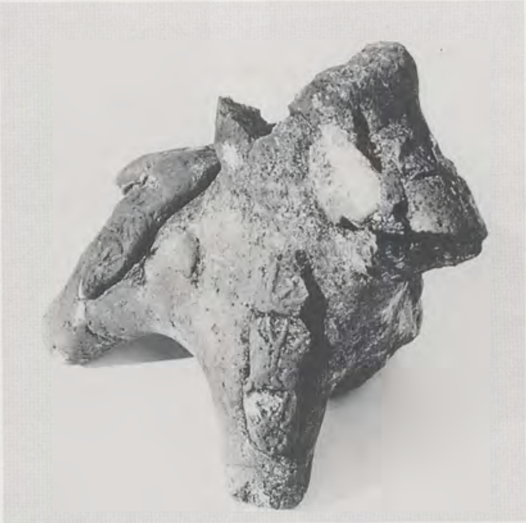

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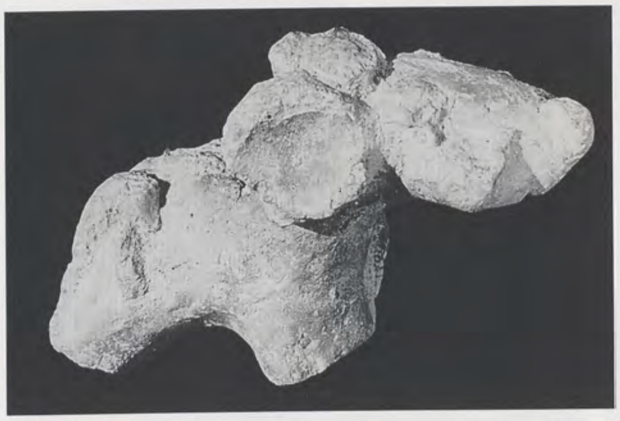

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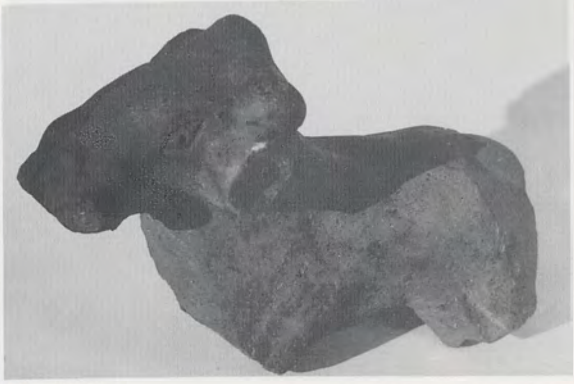

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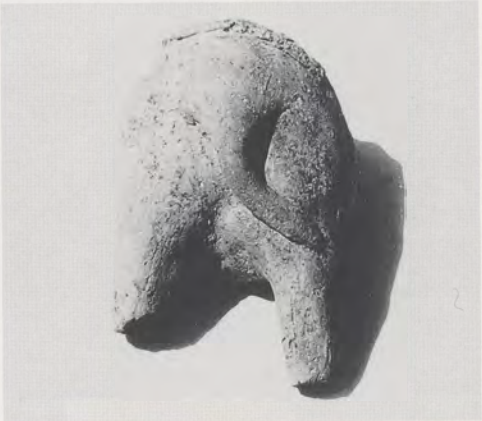

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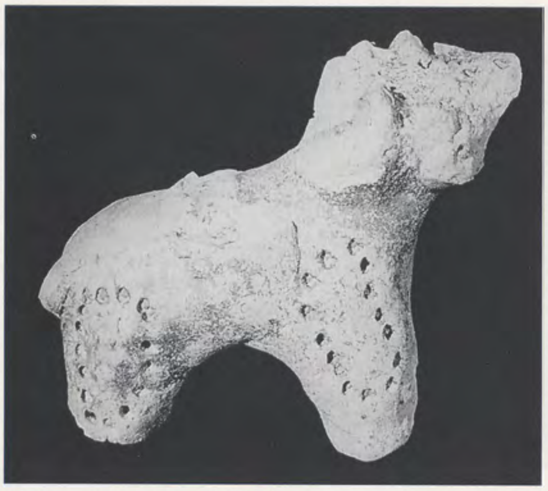
Terracotta Animal Figurines. Period III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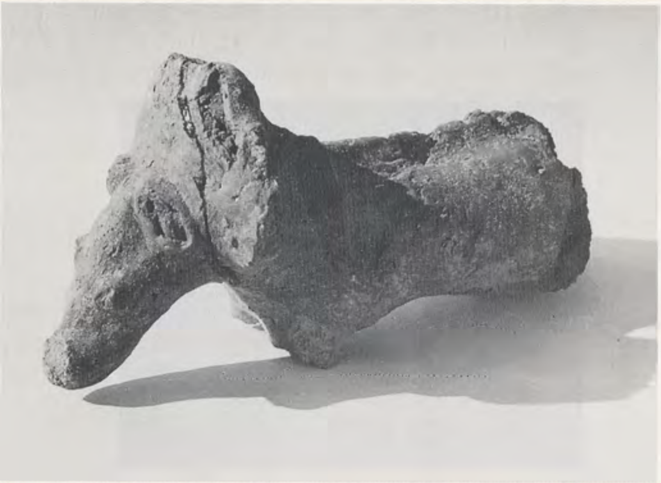
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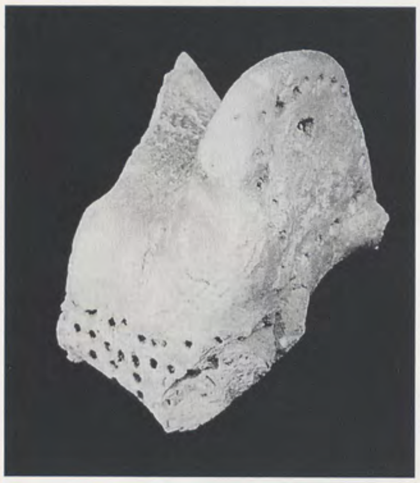
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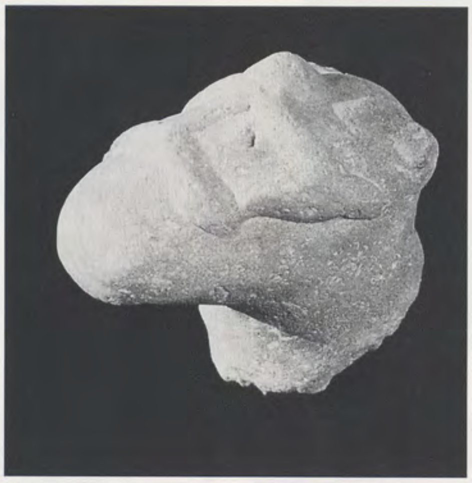
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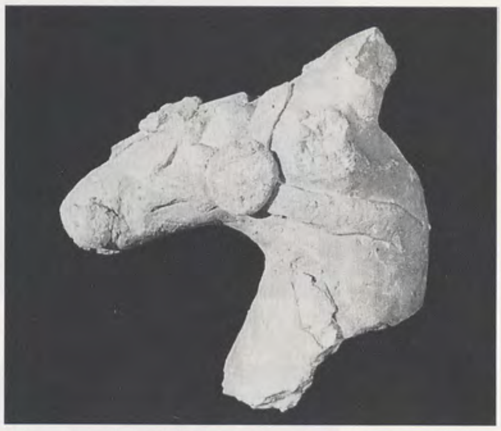
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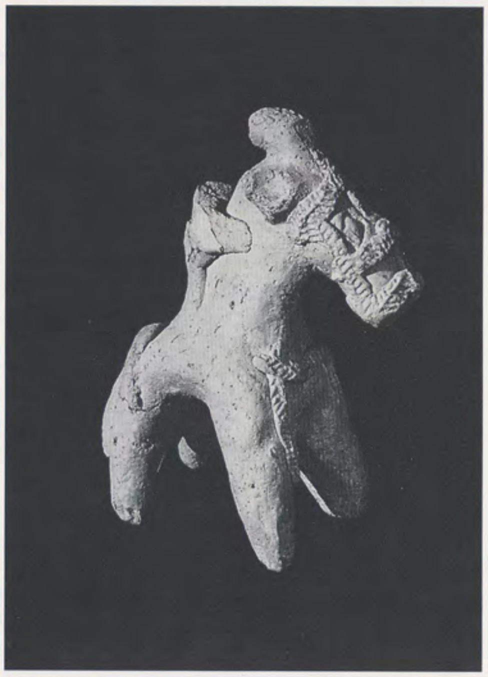
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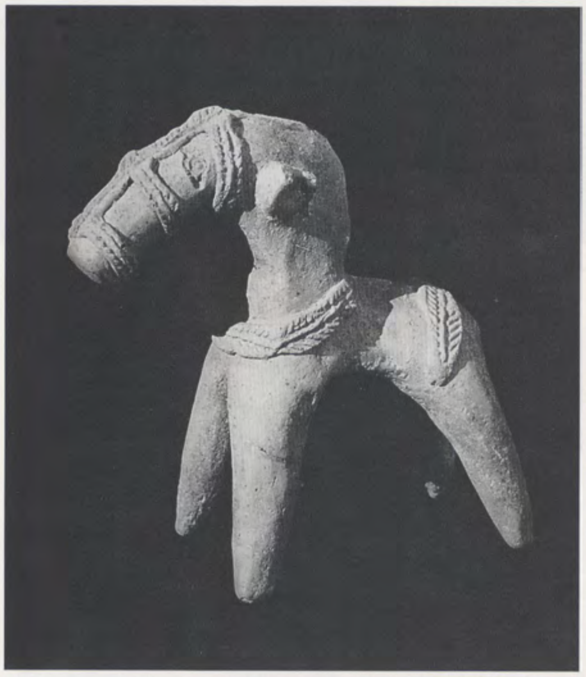
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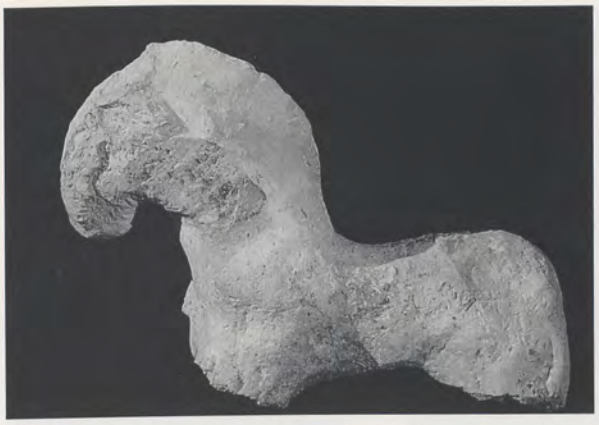
Terracotta Animal Figurines. Period III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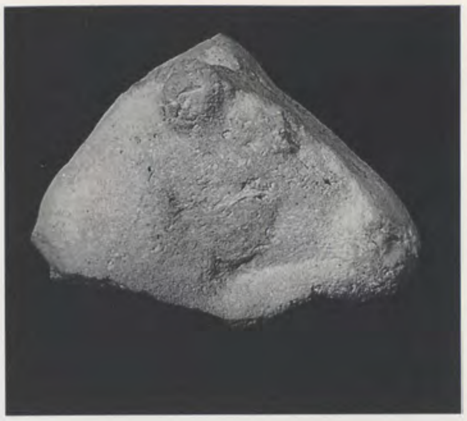
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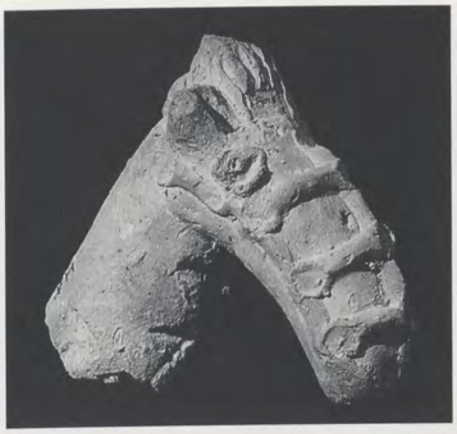
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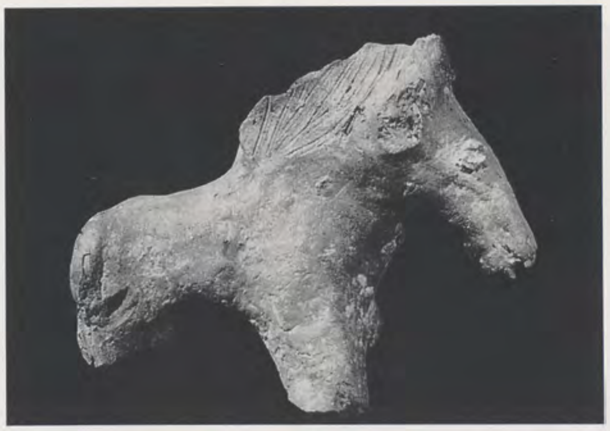
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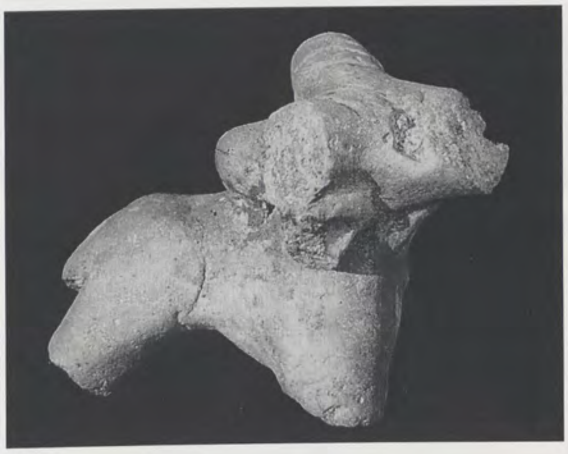
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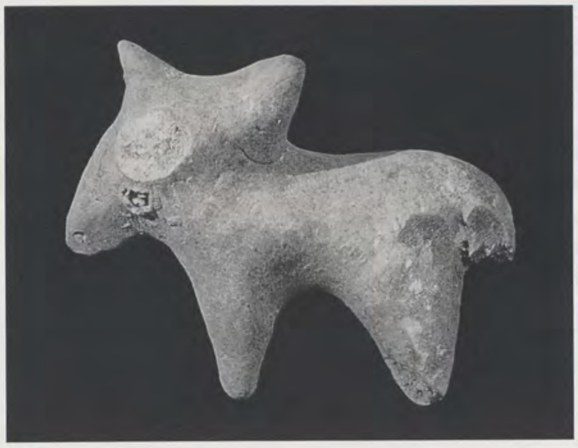
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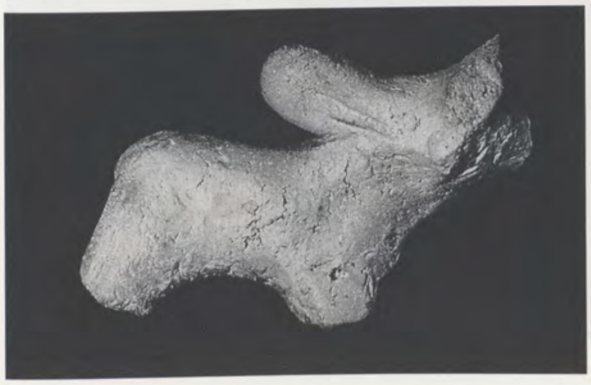
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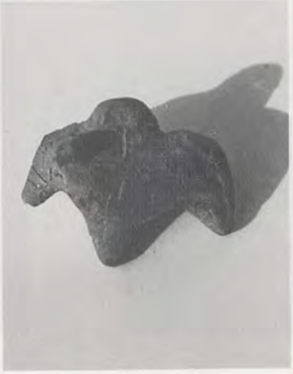
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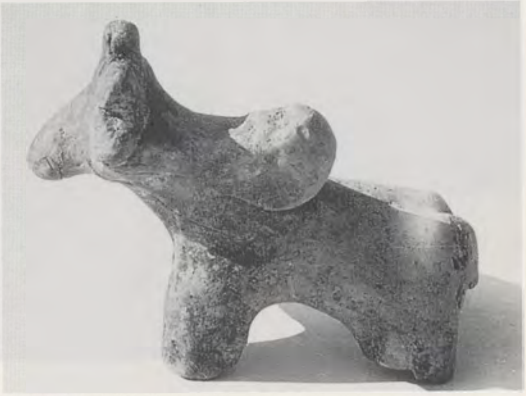
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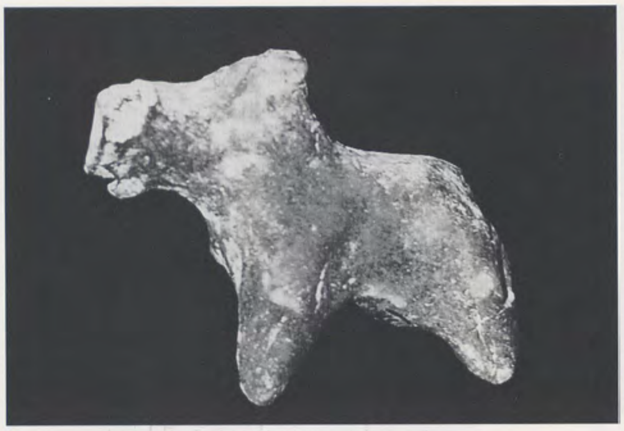
Terracotta Animal Figurines. Period III



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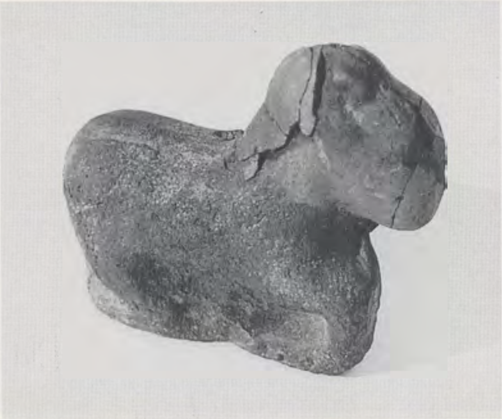

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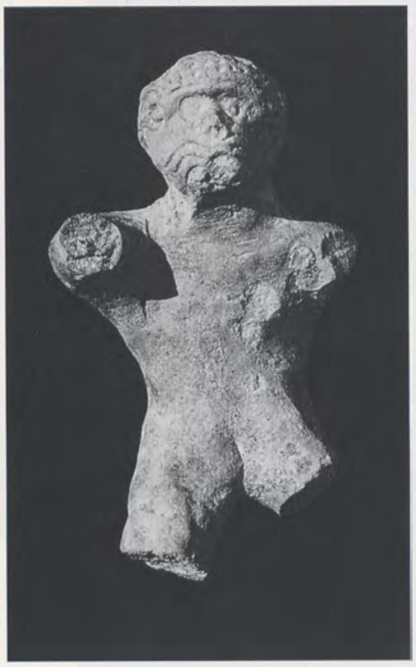

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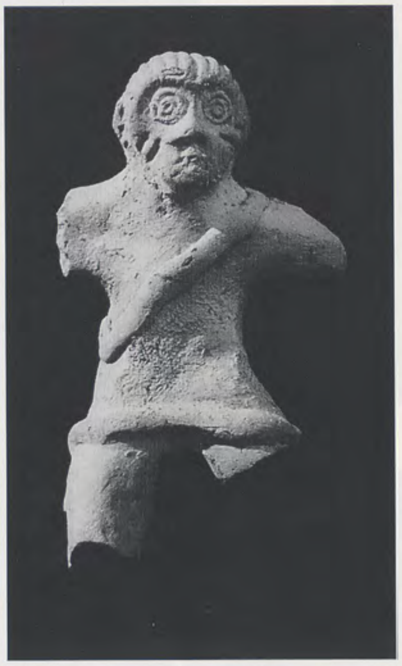

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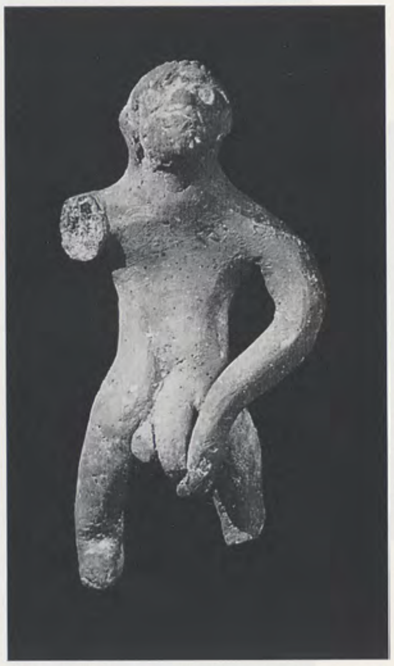

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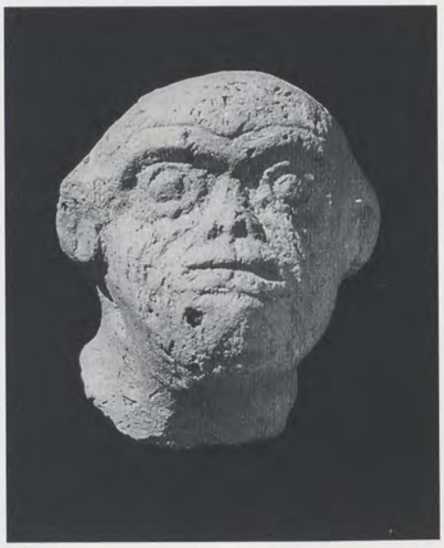

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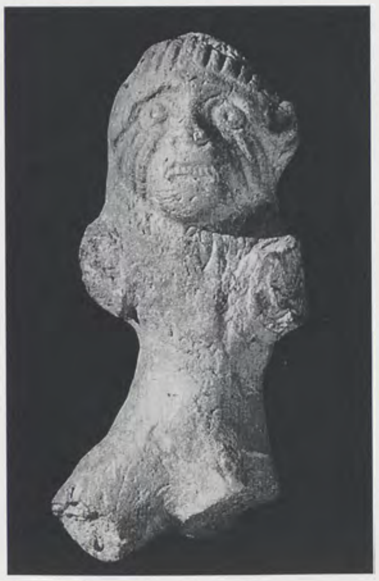

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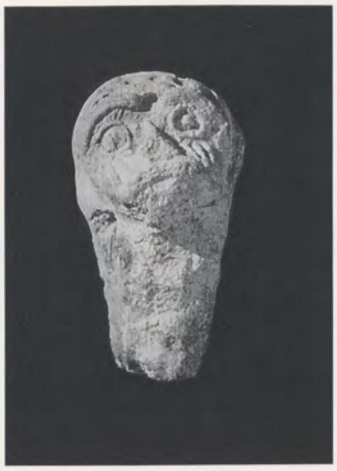
Terracotta Animal Figurines. Period III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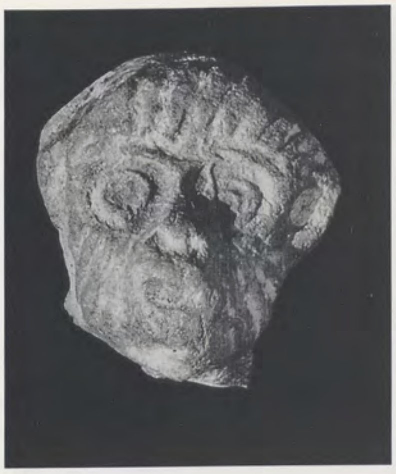
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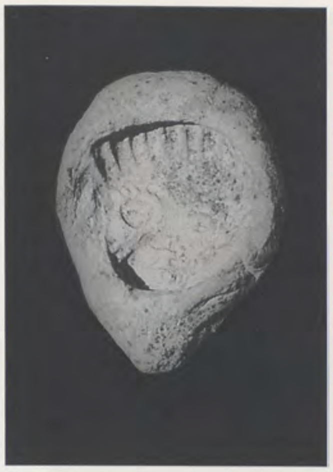
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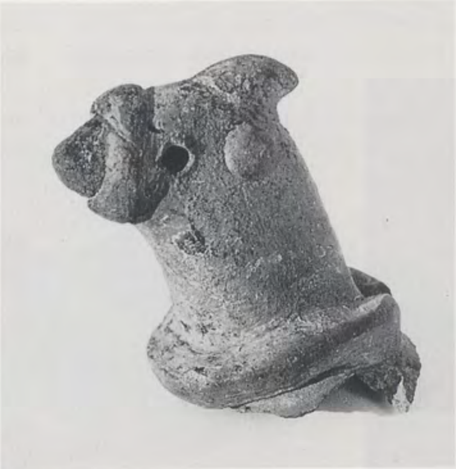
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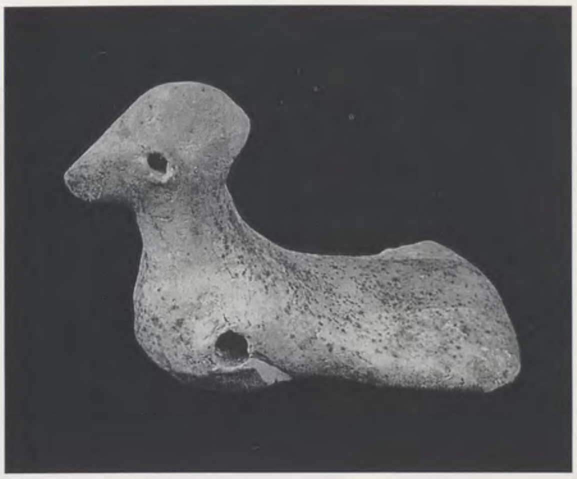
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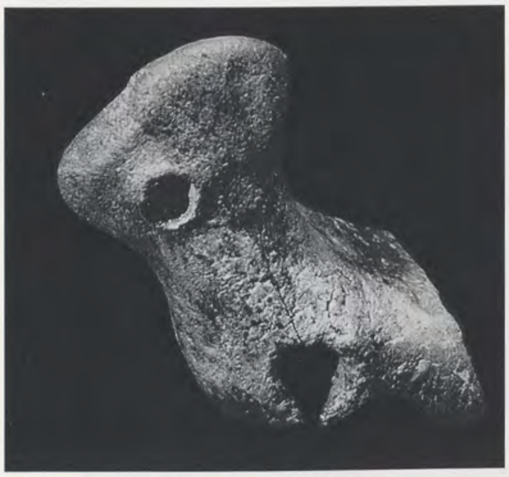
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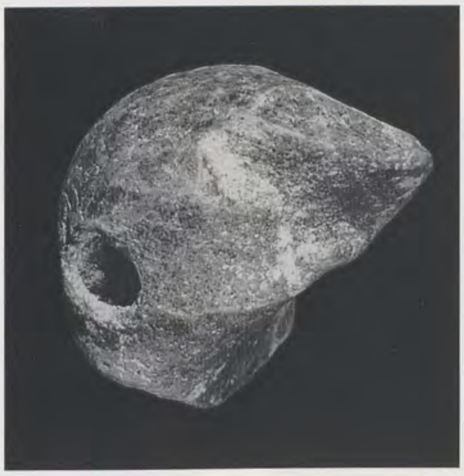
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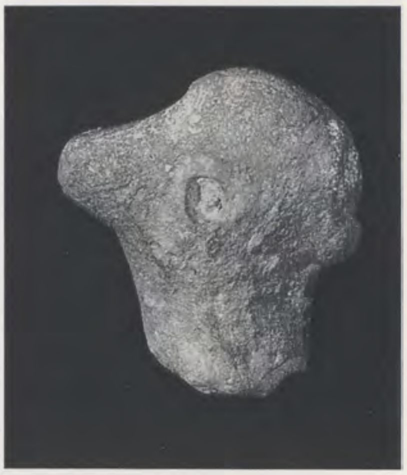
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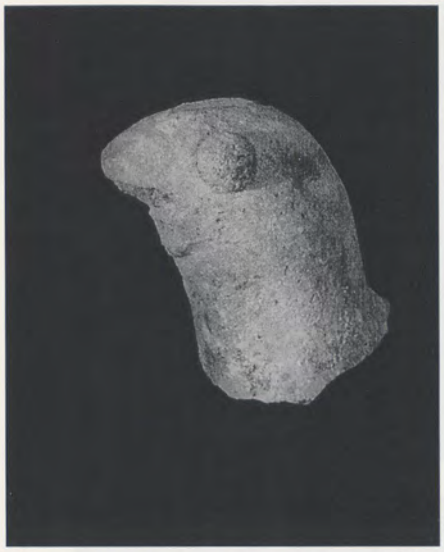
Terracotta Animal Figurines. Period III



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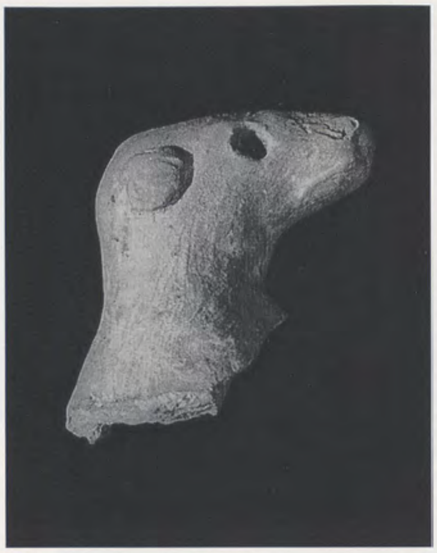

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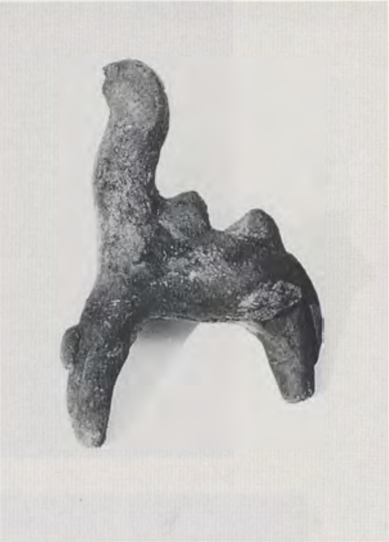

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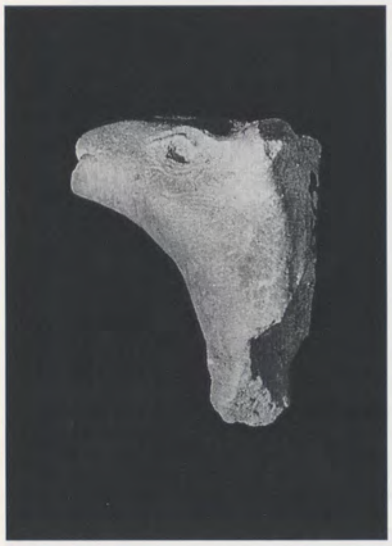

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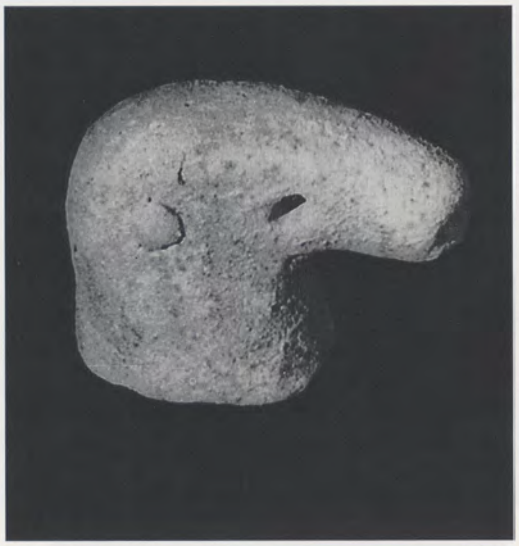

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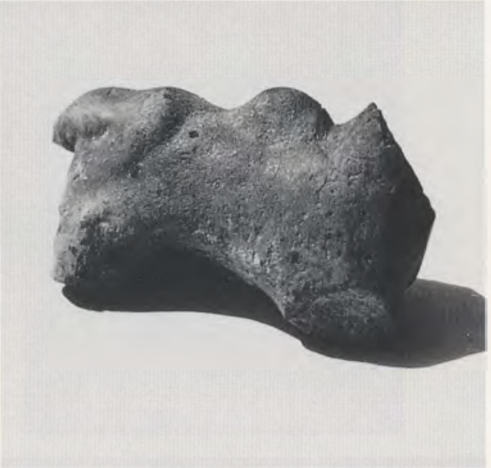

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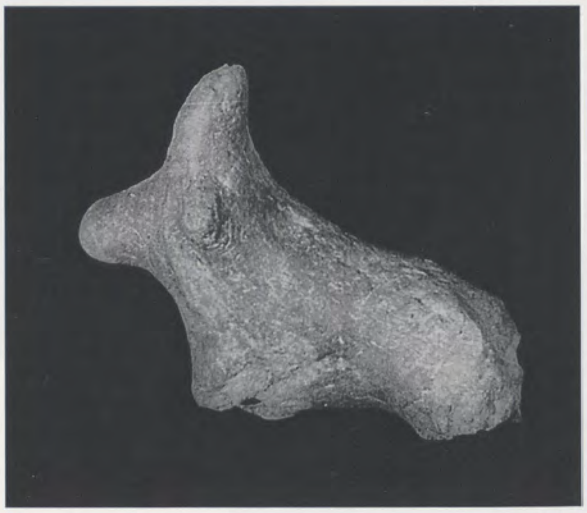

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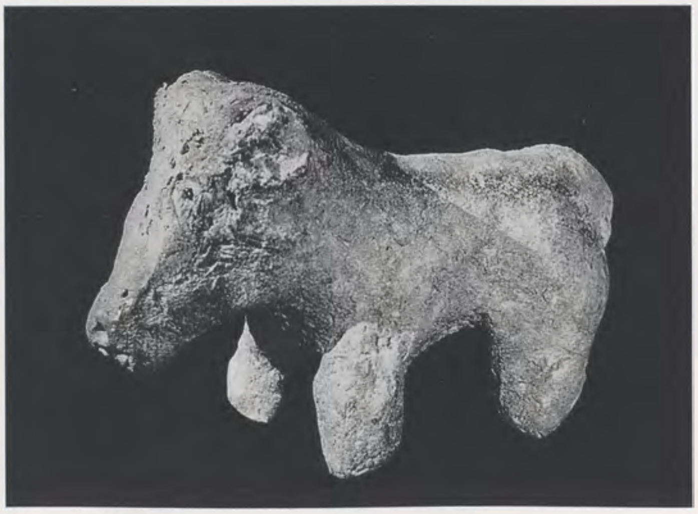

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Terracotta Animal Figurines. Period III

Period IV. Terracotta Animals from Levels 24 to 22

70. Fragment of an elephant. Mouth, trunk, tusks and legs broken off. Eyes lenticular with central pellet. Body plain.
H. 6.9 cm. L. 11.5 cm. Colour: brown. No. So III A 2662.
FS. 2 V 3.0/Ca 0.5, H. 19.90 m. Kṣatrapa. L.24
Note: One more specimen registered as find no. So III A 2720.

71. Elephant. Trunk and head-bulges missing. Tusks broken off in their root-sheaths. Eyes punched as small holes with thrown up edges.
H. 4.7 cm. L. 7.2 cm. Colour: brown. No. So III A 3040.
FS. 2 IV 18.3/Ca 7.0, H. 20.90 m. Kṣatrapa. L.23

72. Fragment of an elephant. Part of head and back. Bulgy skull. Traces of tusks. Eyes on lozenges within incised ellipse. Vertical row of punched holes from forehead to the fracture point of the trunk. Two such shallow holes above both eyes also.
H. 5.3 cm. L. 9.4 cm. Colour: red. No. So III A 2311.
FS. 2 V 1.2/Ca 6.0, H. 20.50 m. Kṣatrapa. L.23

73. Headless fragment of an animal (elephant?). Body heavily stamped with an early Kuṣāṇa decorative pattern as found on the pottery often.
H. 7.0 cm. L. 8.6 cm. Colour: red. No. So III A 3251.
FS. 2 IV 10.95–16.8/Ca 6.4–8.3, H. 20.60–20.35 m.
Kṣatrapa. L.23

74. Decorated horse with oversized neck. Applied head-collar consisting of differently patterned bands arranged crosswise, not in the parallel fashion of Mitra horses. Pointed tuft on top of head. Eyes given as punctured discs. Ears applied. One adversifolious band standing up on rear part.
H. 16.1 cm. L. 13.3 cm. Brown. No. So III A 3548.
FS. 2 III 16.8/Cc 8.9, H. 19.70 m.
Kṣatrapa/Early Kuṣāṇa. L.23/22

75. Headless horse decorated with one rosette each applied to the thighs of the four legs.
H. 10.5 cm. L. 8.7 cm. Brown. No. So III A 3398.
FS. 2 III 17.7/Cc 9.2, H. 19.70 m.
Kṣatrapa/Early Kuṣāṇa. L.23/22

76. Moulded figure of a horse. Made by use of two moulds. Details worn. Area between legs closed by a thin layer of clay.
H. 7.7 cm. L. 6.8 cm. Grey, white paint. No. So III A 2017.
FS. 3 I 0.1/Ca 9.5, H. 20.70 m. Kṣatrapa. L.23

77. Fragment of a small horse with arched neck and crest. Head damaged.
H. 4.8 cm. L. 3.6 cm. Colour: red. No. So III A 1118.
FS. 3 II 5.0–9.5/Ca 16.0–17.7, H. 20.68–20.28 m.
Early Kuṣāṇa. L.22

78. Humped bull with damaged head. Hump type 6.
H. 4.0 cm. L. 4.7 cm. Colour: brown. No. So III A 1906.
FS. 3 I 0.5–6.5/Ca 16.7–18.0, H. 20.15–19.75 m.
Early Kṣatrapa. L.(25)/24.
Note: Two more specimens of same type registered under So III A 2815; 3141.

79. Small humped bull. Neck perforated for fastening a string. Hump type 1.
H. 4.0 cm. L. 5.1 cm. Blackened. No. So III A 2971.
FS. 2 V 6.0–10.5/Cb 13.3–14.5, H. 19.35–19.25 m.
Kṣatrapa. L.24.
Note: Five more specimens registered under So III A 2106; 2170; 2535; 2619; 2852.

80. Small humped bull. Hump type 7.
H. 3.5 cm. L. 3.75 cm. Colour: red. No. So III A 1624.
FS. 3 I 7.5–9.4/Ca 7.0–10.0, H. 20.60–20.30 m.
Kṣatrapa. L.23

81. Humped bull. Hump type 2.
H. 6.8 cm. L. 6.6 cm. Colour: brown. No. So III A 2873.
FS. 2 V 12.3/Cb 3.7, H. 19.25 m. Early Kṣatrapa. L.24.
Note: Four more specimens registered as So III A 1901; 2199; 2491; 3458.

82. Small humped bull. Muzzle broken off. Perforation through neck for fastening a string. Hump type 3.
H. 4.1 cm. L. 5.7 cm. Colour: brown. No. So III A 2826.
FS. 2 V 7.9–9.9/Cb 16.15–18.35, H. 19.90–19.70 m.
Kṣatrapa. L.23.
Note: Five more specimens of this type registered as find nos. So III A 2258; 2265; 2556; 2880; 3415.

83. Humped bull. Long stretched body. Hump type 3.
H. 3.7 cm. L. 6.6 cm. Light brown. No. So III A 2702.
FS. 2 V 0.5–10.5/Ca 9.5–10.5, H. 20.17–19.78 m.
Kṣatrapa. L.24/23

84. Humped bull. Hump type 8.
H. 4.4 cm. L. 6.4 cm. Grey-brown. No. So III A 3631.
FS. 2 V 9.5–10.5/Cb 19.5-Cc 9.5, H. 19.20–18.95 m.
Early Kṣatrapa. L.24
Note: Three more specimens of same type registered as find nos. So III A 1709; 2146; 3186.

85. Mutilated buffalo. Long stretched body. Perforation through neck for fastening a string. Muzzle broken away.
H. 3.6 cm. L. 7.9 cm. Colour: brown. No. So III A 3136.
FS. 2 IV 10.55/Cc 5.7, H. 19.45 m. Kṣatrapa L.23

86. Toybird with perforation for wheel-axle.
H. 6.3 cm. L. 8.5 cm. Colour: brown. No. So III A 2213.
FS. 2 V 13.7/Ca 17.5, H. 19.70 m. Kṣatrapa. L.24

87. Bird with outstretched wings. From a votive tank.
H. 2.8 cm. L. 5.1 cm. Colour: brown. No. So III A 3178.
FS. 2 IV 14.0/Cc 4.5, H. 18.90 m. Kṣatrapa. L.24

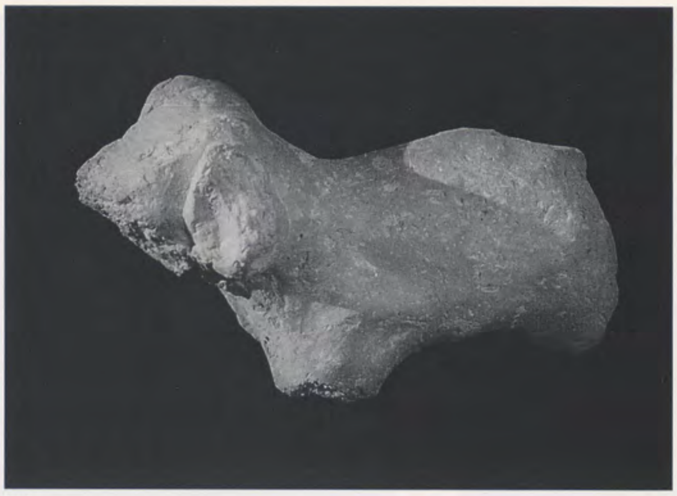
88. Head of a bird. Tip of beak broken off. Eyes depicted as large shallow holes.
H. 4.4 cm. L. 4.4 cm. Colour: greyish. No. So III A 2400.
FS. 2 V 6.5/Ca 11.1, H. 19.95 m. Kṣatrapa. L.24/23

89. Head of a bird with semicircular crest.
H. 2.4 cm. L. 4.3 cm. Colour: brown. No. So III A 2832.
FS. 2 V 2.6/Cb 10.5, H. 20.00 m. Kṣatrapa. L.23

90. Head and neck of a bird. Beak sticks out of a hood. Intentionally pierced hole on neck.
L. 4.3 cm. Colour: greyish. No. So III A 2645.
FS. 2 V 0.5/Cb 4.5, H. 20.02 m. Kṣatrapa. L.23

91. Head of indefinite animal. Perforation for eyes, mouth slightly open.
H. 5.0 cm. Colour: red. No. So III A 2291.
FS. 2 V 13.1/Ca 3.2, H. 19.90–19.55 m.
Kṣatrapa. L.24

92. Unproportioned lion with oversized head and short legs. Eyes and nose applied, mouth notched. In centre of mouth a large round hole. Hair on forehead and neck incised as strokes.
H. 10.6 cm. L. 8.3 cm. Colour: grey-brown. No. So I 294.
FS. 2 V 9.7/Ca 13.5, H. 19.65 m. Kṣatrapa. L.24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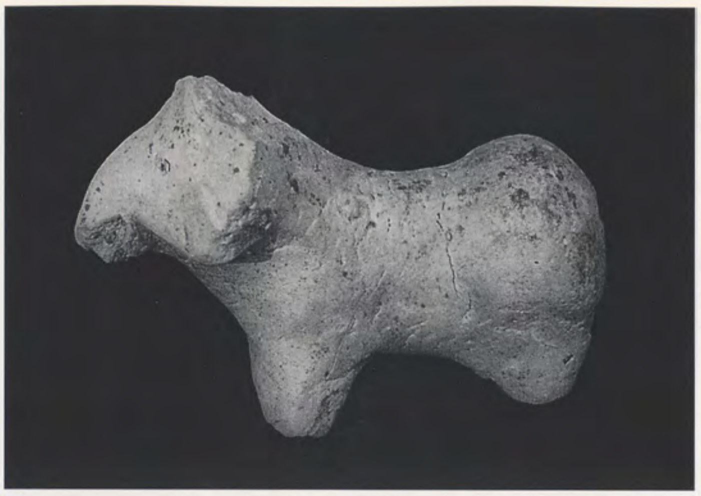
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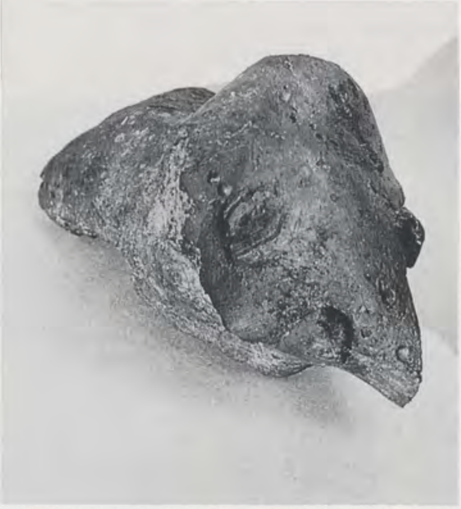
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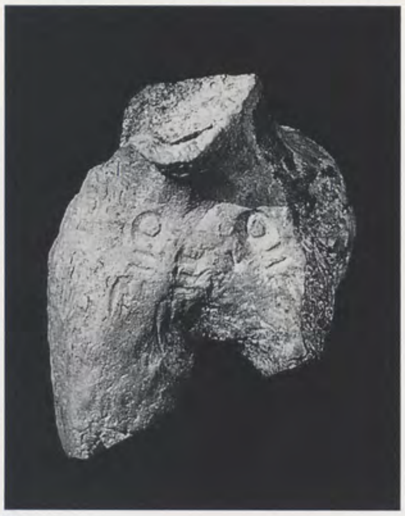
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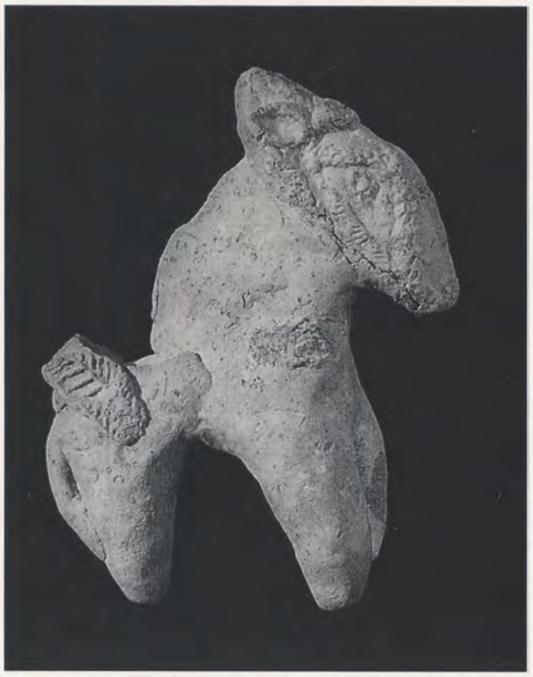
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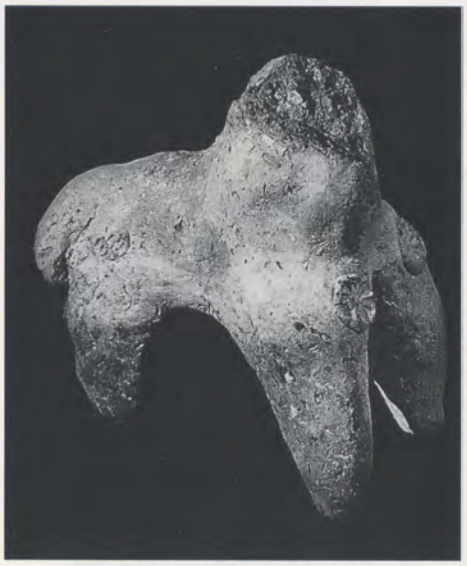
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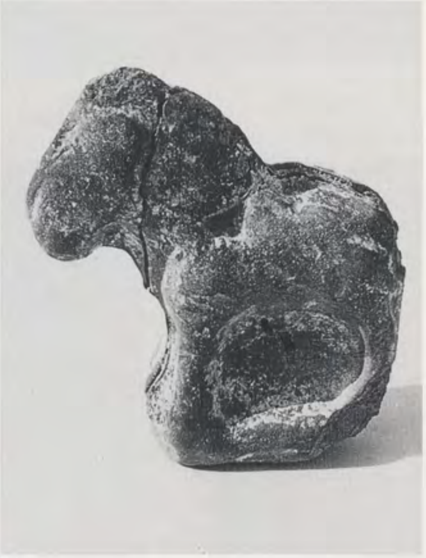
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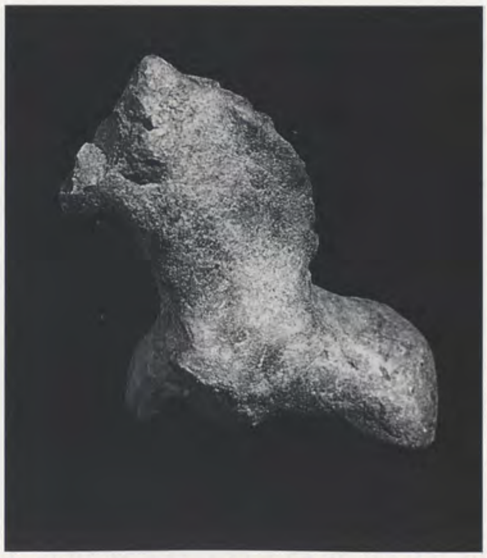
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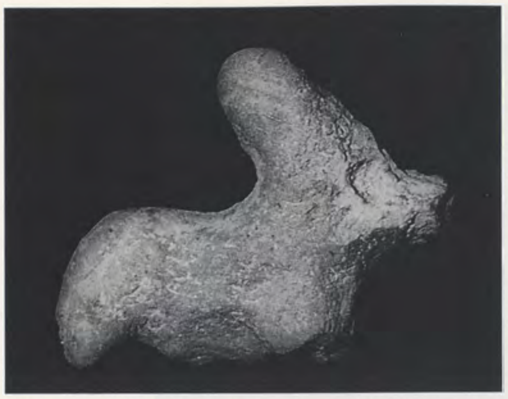
Terracotta Animal Figurines. Period IV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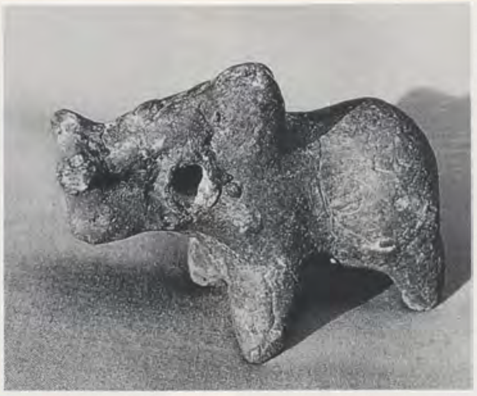
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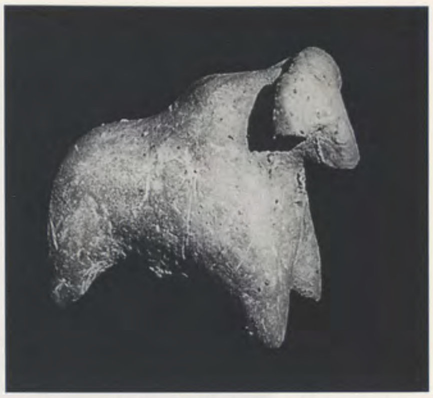
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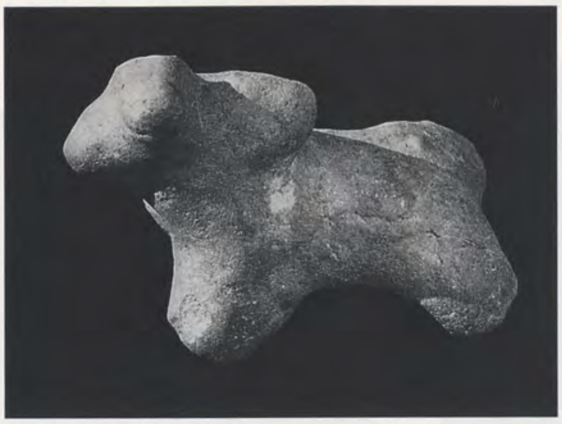
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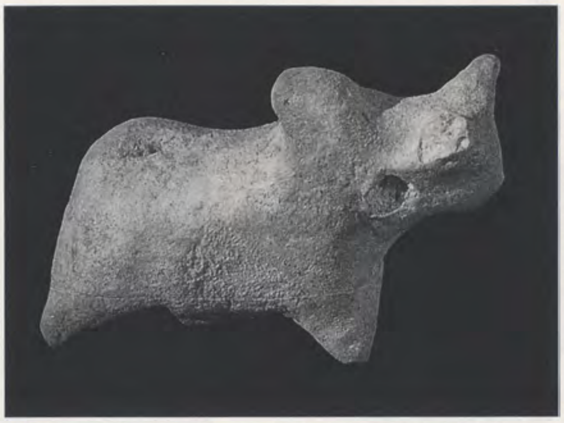
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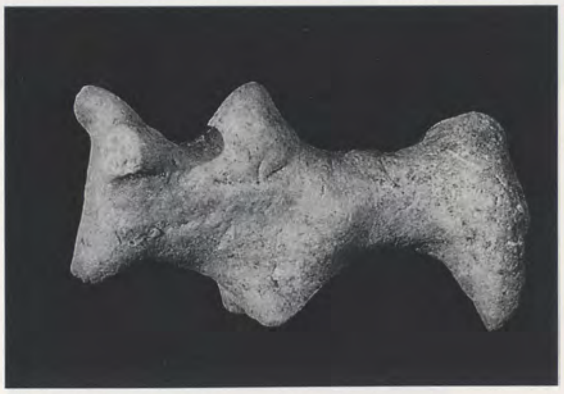
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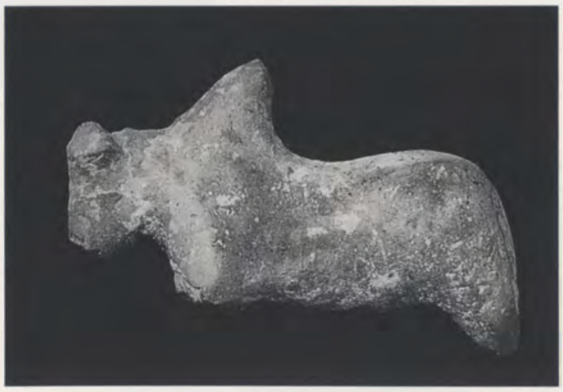
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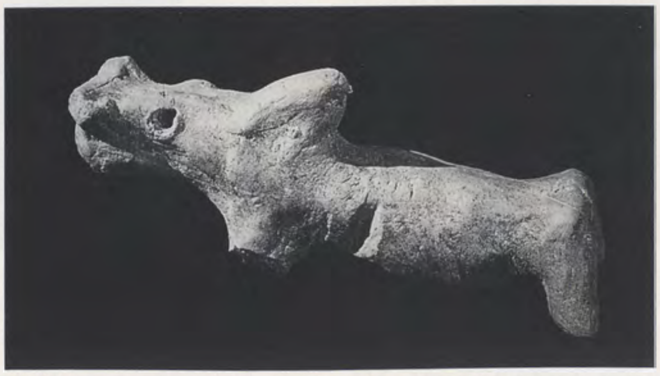
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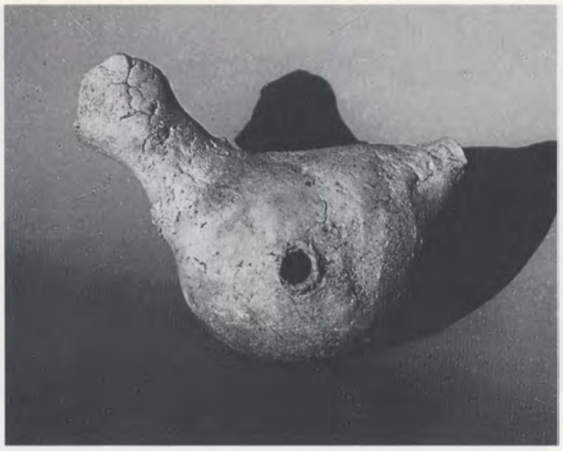
Terracotta Animal Figurines. Period IV



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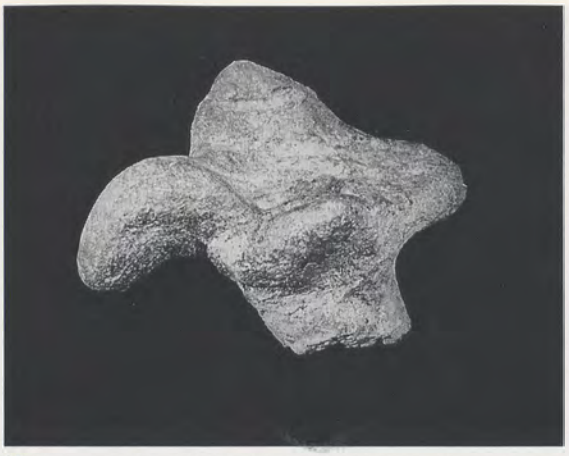

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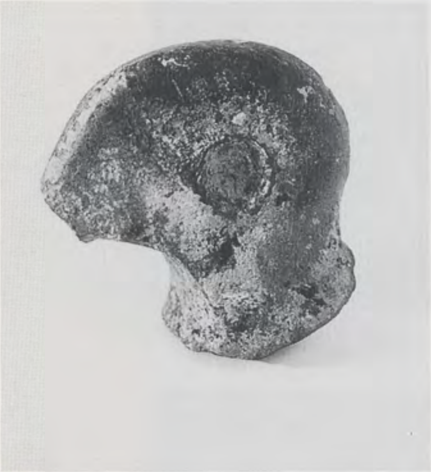

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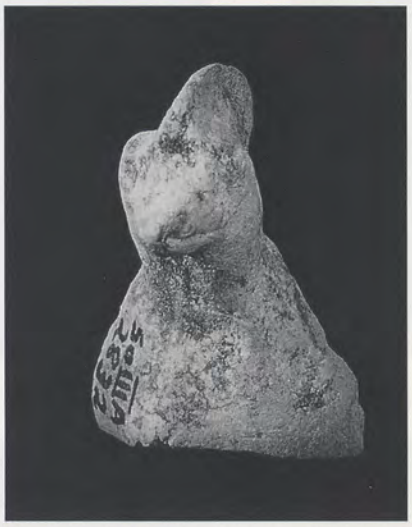

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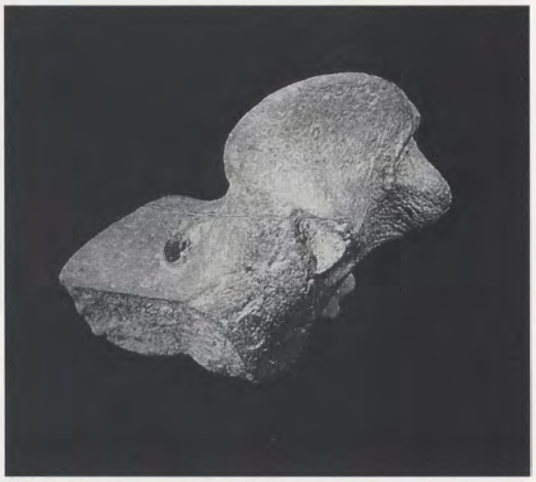

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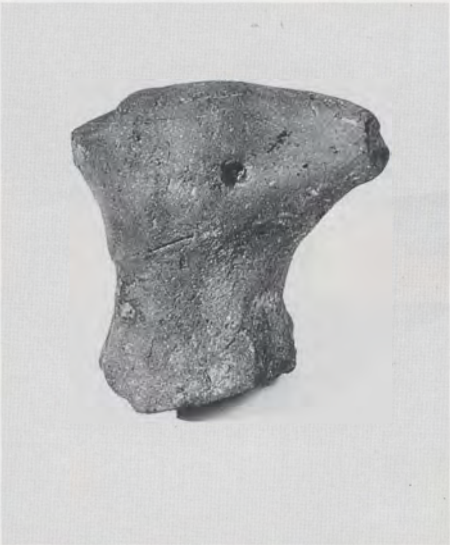

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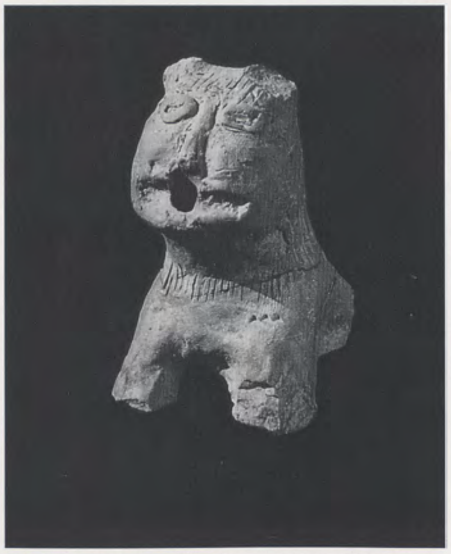

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Terracotta Animal Figurines. Period IV

Period V. Terracotta Animals from Levels 22 to 15

93. Frontal part of elephant with complete trunk. Eyes inserted as holes. Bulges on head standing upright, being perforated in the centre. Ears stretched sidewards. Root-sheath of tusks worn.
H. 9.4 cm. Colour: dirty brown. No. So III A 1250.
FS. 2 V 16.0–19.5/Ca 13.25–19.5, H. 22.05–21.75 m.
Kuṣāṇa. L.20

94. Trunk of an elephant with curved tip.
H. 9.3 cm. Colour: red. No. So III A 1132.
FS. 3 II 4.9–9.5/Ca 18.0–19.5, H. 21.28–20.78 m.
Kuṣāṇa. L.21

95. Rear part of an elephant with elaborated tassel.
H. 5.7 cm. L. 5.7 cm. Colour: brown. No. So III A 1873.
FS. 2 IV 4.2–6.2/Cb 16.6–19.5, H. 21.30–21.00 m.
Kuṣāṇa. L.21

96. Fragment of an elephant. Bulgy part of head raised like a hood with perforation in its centre. Eyes seemingly circular with pellet. Root-sheaths of tusks worn. Trunk broken off halfways. On back markings of a saddle.
H. 7.3 cm. L. 12.0 cm. Colour: red, blackened by fire.
No. So III A 2070. FS. 2 IV 7.0/Ca 9.55, H. 22.85 m.
Kuṣāṇa. L.18

97. Head of a horse with arched neck. Short ears, eyes applied as discs. Mouth slightly open.
H. 4.0 cm. L. 5.6 cm. Colour: red. No. So III A 1030.
FS. 3 II 6.0–9.5/Ca 14.5–19.5, H. 21.48–21.18 m.
Kuṣāṇa. L.21

98. Large buffalo. Two legs missing. Prominent hump. Eyes punched as circles, mouth slightly open. Ribbon around neck.
H. 16.0 cm. L. 18.5 cm. Colour: red. No. So I 303.
FS. 2 IV 5.85/Cb 4.8, H. 21.50 m. Kuṣāṇa. L.21

99. Small humped bull of unburnt clay. Small head, massive body. Hump with fracture. Hump type 5.
H. 4.2 cm. L. 5.4 cm. Colour: grey. No. So III A 3145.
FS. 2 IV 9.5–10.5/Cb 2.0–9.5, H. 21.55–21.40 m.
Kuṣāṇa. L.21

100. Small humped bull with pierced eyes and perforations through neck and hump. Hump type 1.
L. 4.3 cm. Brown, traces of pūjā paint. No. So III A 1476.
FS. 2 III 16.25–19.5/Ca 14.3–16.0, H. 22.30–22.00 m.
Kuṣāṇa. L.20

101. Humped bull with perforation for wheel axles instead of legs. Curved hump of type 2.
H. 4.2 cm. L. 7.65 cm. Dark grey. No. So III A 1387.
FS. 2 IV 0.5–6.0/Cb 15.5–17.0, H. 21.55–21.30 m.
Kuṣāṇa. L.21

102. Humped bull. Head broken off. Hump type 6.
H. 6.0 cm. L. 7.5 cm. Colour: brown. No. So III A 958.
FS. 2 V 12.0–12.5/Ca 10.5–14.5, H. 22.60–22.30 m.
Kuṣāṇa. L.18
Note: Ten more specimens of this type registered as find nos. So III A 846; 894; 1293; 1393; 1831; 1850; 2539; 2727; 2784; 2879.

103. Humped bull. Perforation for eyes. Hump type 6.
H. 4.0 cm. L. 5.0 cm. Yellow-brown. No. So III A 835.
FS. 2 V 10.5–15.0/Cc 0.5–3.5, H. 23.20–22.80 m.
Late Kuṣāṇa. L.16.
Note: One more specimen registered as find no. So III A 1808.

104. Humped bull. Small perforation through mouth, a larger one through neck. Hump type 3.
H. 3.5 cm. L. 6.1 cm. Colour: brown. No. So III A 3265.
FS. 2 IV 9.5–10.5/Be 19.5-Ca 0.5, H. 21.65–21.30 m.
Kuṣāṇa. L.21
Note: Four more specimens of same hump type registered as nos. So III A 1348; 2800; 2898; 2906.

105. Humped bull. Hump type 4 but perforated.
H. 5.5 cm. L. 7.5 cm. Colour: brown. No. So III A 2087.
FS. 2 IV 19.6/Ca 0.8, H. 22.10 m. Kuṣāṇa. L.20

106. Humped bull. Hump type 1. Legs perforated for insertion of wheel axles.
H. 4.5 cm. L. 6.9 cm. Colour: grey. No. So III A 3293.
FS. 2 III 18.6/Cb 15.5, H. 21.60 m. Kuṣāṇa. L.21.
Note: One further specimen registered as find no. So III A 1550.

107. Forepart of a humped bull. Hump type 1.
H. 5.5 cm. L. 4.3 cm. Light brown. No. So III A 1160.
FS. 2 IV 2.0–9.5/Ca 6.0–9.5, H. 23.11–22.81 m.
Kuṣāṇa. L.18.
Note: Three more specimens of same type registered as finds nos. So III A 970; 2111; 2329.

108. Humped bull. Hump type 7.
H. 4.4 cm. L. 6.8 cm. Blackened by fire. No. So III A 656.
FS. 2 III 18.0–2 IV 1.5/Ca 7.5–9.5, H. 24.30–23.90 m.
Late Kuṣāṇa. L.16

109. Fragment of a ram with remains of axle-holes through legs. Head mutilated.
H. 5.0 cm. L. 9.2 cm. Brown. No. So III A 2159.
FS. 7.8/Cb 1.1, H. 21.00 m. Kuṣāṇa. L.21

110. Head of a ram with licking tongue and large nostrils. Left horn preserved.
L. 6.5 cm. Colour: red. No. So III A 1699.
FS. 2 V 9.5/Cb 6.0, H. 21.60 m. Kuṣāṇa. L.20/19

111. Fragment of a ram.
H. 8.5 cm. L. 10.3 cm. Colour: brown. No. So III A 791.
FS. 2 IV 12.5/Ca 10.5, H. 23.45–22.90 m.
Kuṣāṇa. L.18/16

112. Fragment of a bird with extended wings.
H. 5.6 cm. L. 9.2 cm. Colour: brown. No. So III A 3243.
FS. 2 IV 10.0/Ca 11.8, H. 21.40 m. Kuṣāṇa. L.21

113. Beak of a bird (Garuḍa?). Large lozenge-shaped eye on bulgy part of head.
H. 3.1 cm. L. 5.3 cm. Colour: red. No. So III A 1361.
FS. 2 V 7.5–9.5/Ca 1.0–3.5, H. 21.65–21.35 m.
Kuṣāṇa. L.21

114. Head and neck of an animal (bird?). Eyes indicated by perforation.
H. 5.7 cm. Colour: brown. No. So III A 2804.
FS. 2 IV 0.5–4.5/Cb 8.0–9.5, H. 21.65–21.30 m.
Kuṣāṇa. L.21

115. Headless bird with incised feathers all over the body.
H. 5.8 cm. L. 9.6 cm. Colour: brown. No. So III A 3183.
FS. 2 III 8.0/Cc 0.9, H. 21.20 m. Kuṣāṇa. L.21

116. Head of a bird. Eyes shaped as incised rings with dotted eyeballs. Beak broken off.
H. 4.6 cm. Colour: red with mica. No. So III A 1480.
FS. 2 IV 10.5–15.0/Cc 9.5–10.1, H. 22.66–22.06 m.
Kuṣāṇa. L.17

117. Head and neck of a bird. Eyes simply incised as uneven circles. Mouth slightly open.
H. 6.5 cm. Colour: red. No. So III A 1090.
FS. 2 V 19.05/Ca 19.3, H. 23.20 m. Late Kuṣāṇa. L.16

118. Spirally contracted object (snake?). Head broken off.
Ø 3.5 cm. Colour: red. No. So III A 3157.
FS. 2 IV 12.6/Cc 9.35, H. 20.95 m. Kuṣāṇa. L.22/21

119. Hood of an originally seven-headed cobra. Mutilated remains of four heads visible. On the reverse vertically incised lines indicating seven snake bodies.
H. 13.8 cm. B.16.6 cm. Colour: red. No. So III A 1276.
FS. 2 IV 7.2–9.5/Ca 11.0–16.0, H. 22.70–22.50 m.
Kuṣāṇa. L.19
Note: One more specimen of hood-fragment registered as So III A 1286.

120. Head of an animal (antilope?). Horns broken off. Eyes pierced, showing upturned edges.
H. 2.7 cm. Colour: grey-brown. No. So III A 3118.
FS.2 IV 0.5–6.0/Ca 19.5-Cb 0.5, H. 21.90–21.70 m.
Kuṣāṇa. L.21

121. Head of an animal (camel?). Eyes marked as perforation. Ears applied as patches. Long neck slightly bent.
H. 5.7 cm. Colour: red. No. So III A 1115.
FS. 2 IV 4.5–7.0/Be 16.0–19.5, H. 22.60–22.30 m.
Kuṣāṇa. Ca L.20

122. Small indefinite animal with long-stretched, but worn head and pointed mouth. Ears upright. On back two holes.
H. 2.5 cm. L. 4.1 cm. Blackened by fire. No. So III A 959.
FS. 2 V 12.95/Cb 3.26, H. 22.57 m. Kuṣāṇa. L.18

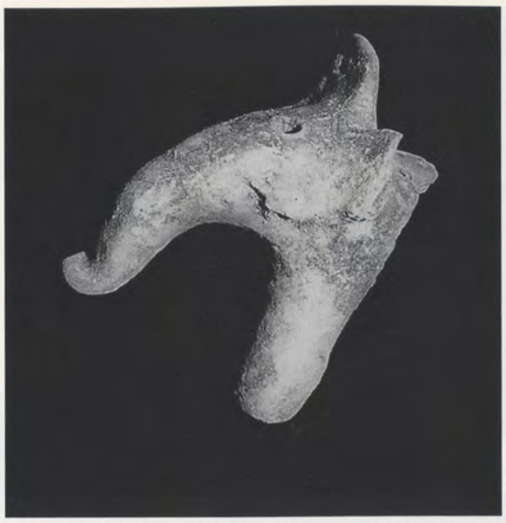
123. Fragment of an indefinite animal (horse?).
H. 3.3 cm. L. 5.6 cm. Colour: red. No. So III A 1629.
FS.2 III 11.0/Cb 16.5, H. 22.80–22.50 m. Kuṣāṇa. L.18/17

124. Head and neck of an indefinite animal. Eyes and ears impressed.
H. 5.9 cm. Colour: red. No. So III A 945.
FS. 2 V 2.5–7.5/Cc 8.5–10.5, H. 22.60–22.30 m.
Kuṣāṇa. L.17/16

125. Head of a fawn? Eyes in lozenges. Perforation in front part of head for fastening a string. Nostrils and mouth marked.
H. 6.5 cm. Colour: brown. No. So III A 1031.
FS. 2 IV 6.0–8.0/Cb 2.5–9.5, H. 23.53–23.28 m.
Late Kuṣāṇa. L.16

126. Mutilated animal (rat?). Eyes pierced.
H. 3.2 cm. L. 5.5 cm. Blackened by fire. No. So III A 965.
FS. 2 IV 7.5–9.5/Cb 10.5–16.5, H. 23.67–23.27 m.
Late Kuṣāṇa. L.16

127. Cheeky little dog? Head and ears upturned, tail upright. Eyes inserted as perforation.
H. 5.5 cm. L. 5.5 cm. Colour: brown. No. So III A 895.
FS. 2 V 2.5–7.5/Cc 8.0–9.5, H. 23.05–22.75 m.
Late Kuṣāṇa. L.16



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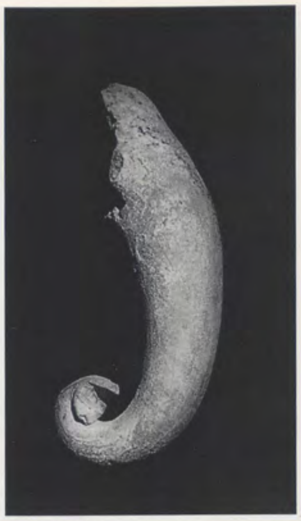

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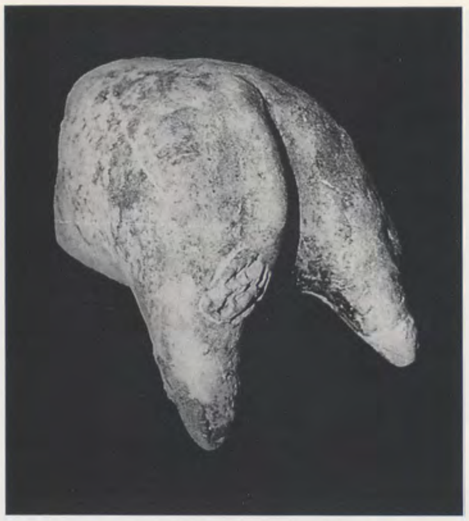

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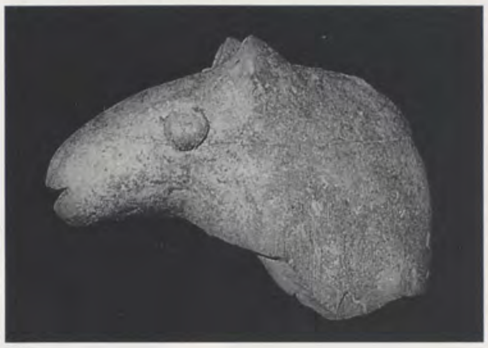

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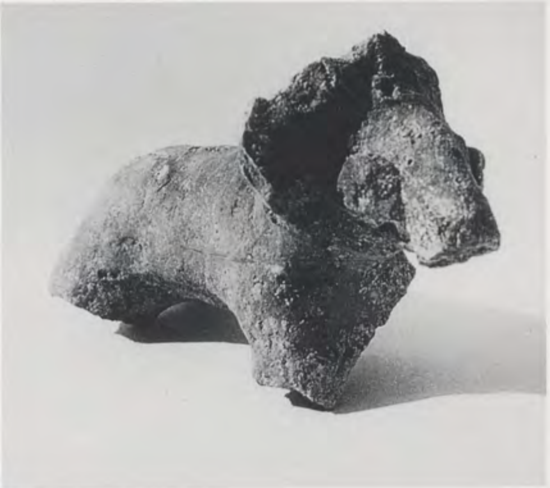

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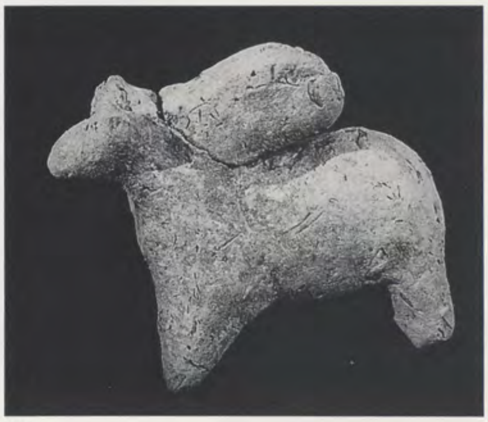

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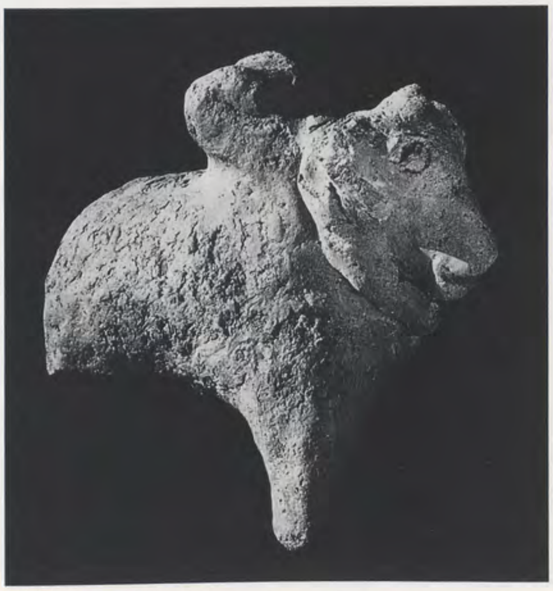

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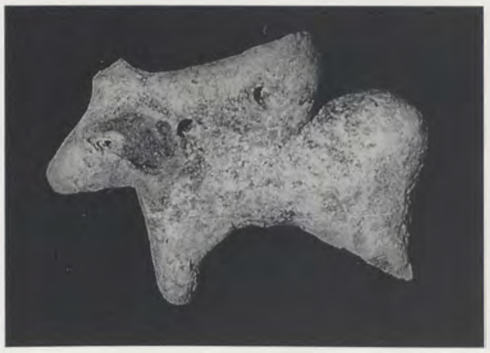

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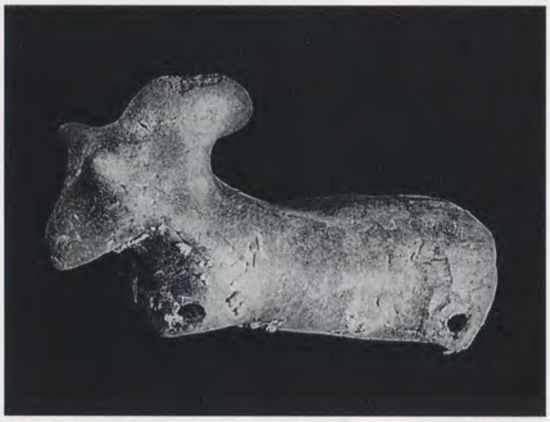
Terracotta Animal Figurines. Period V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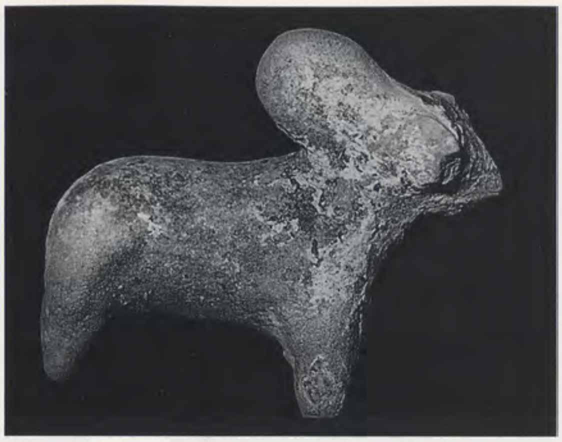
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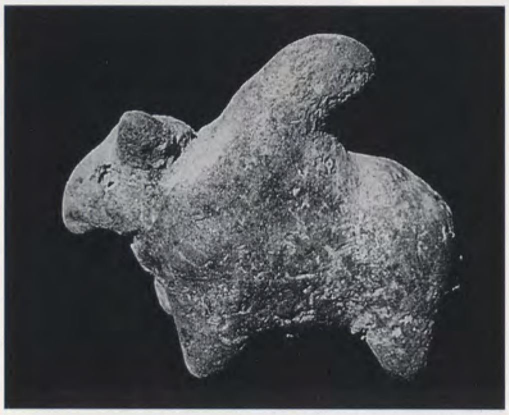
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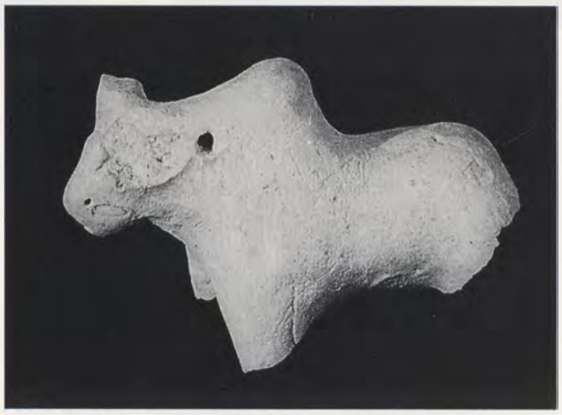
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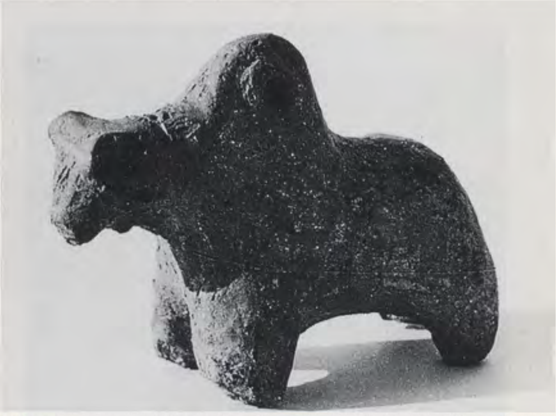
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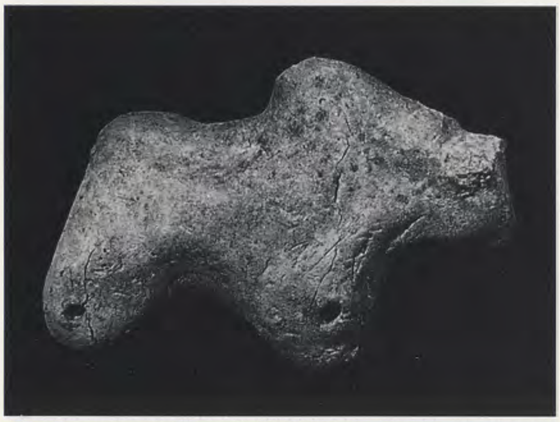
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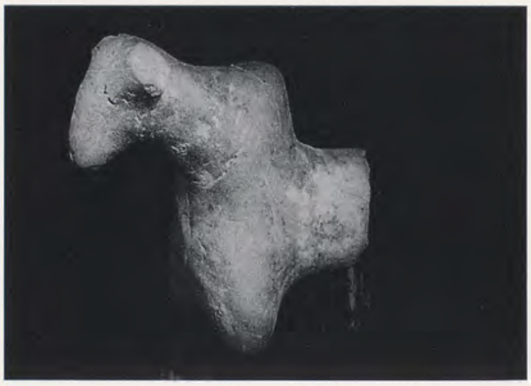
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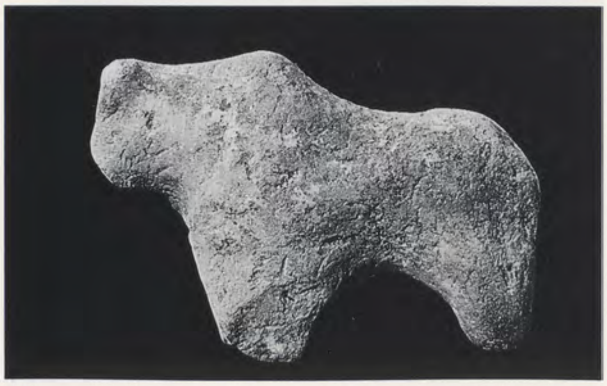
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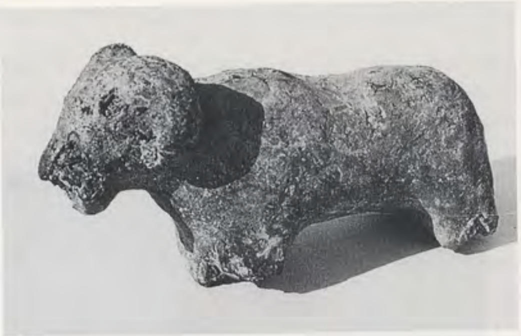
Terracotta Animal Figurines. Period V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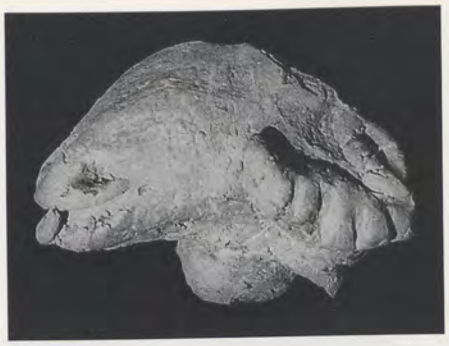
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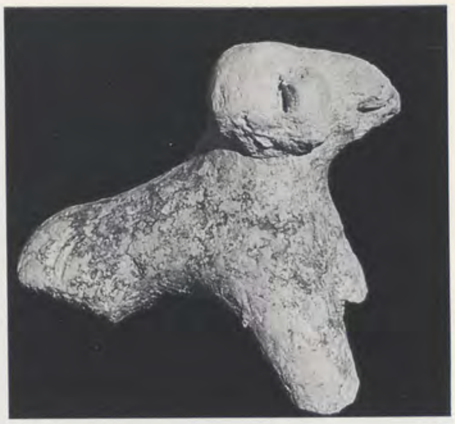
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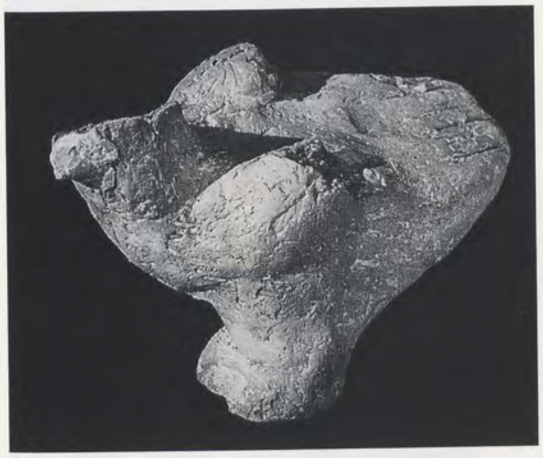
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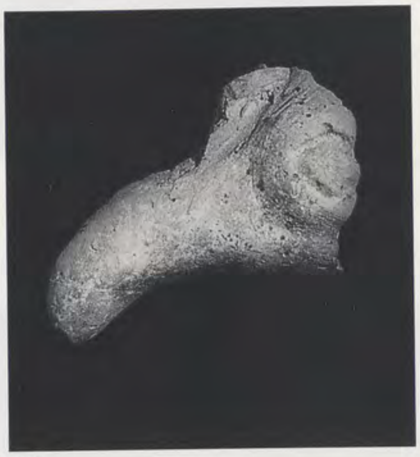
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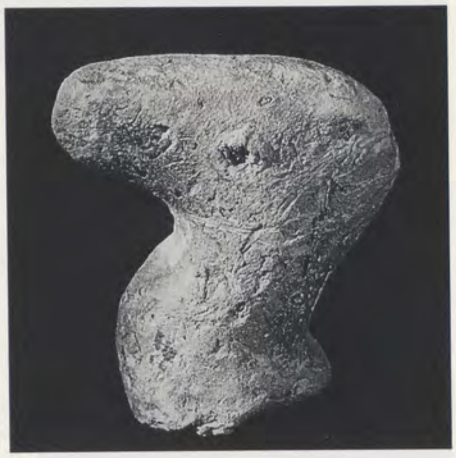
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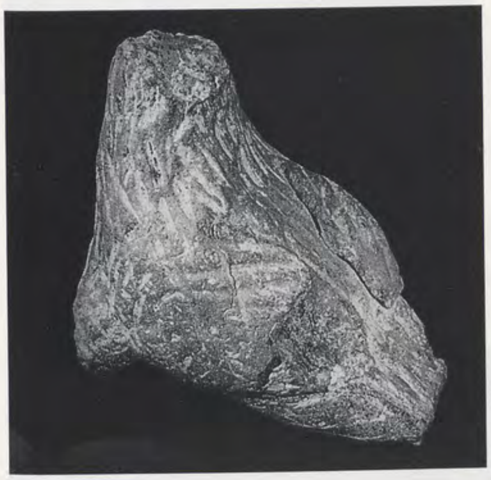
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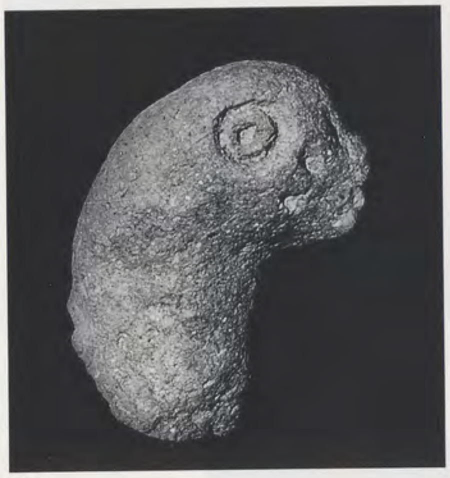
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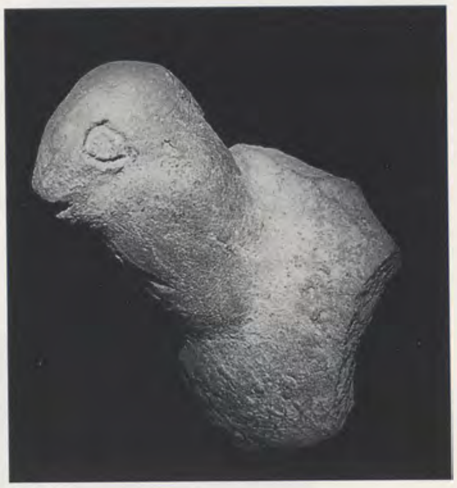
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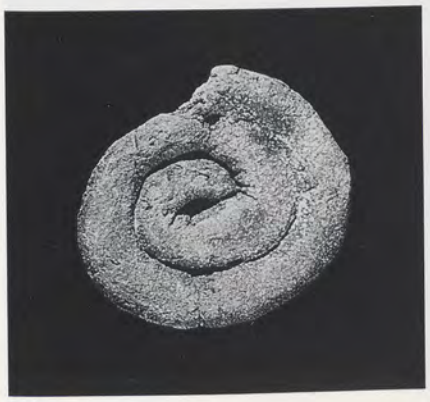
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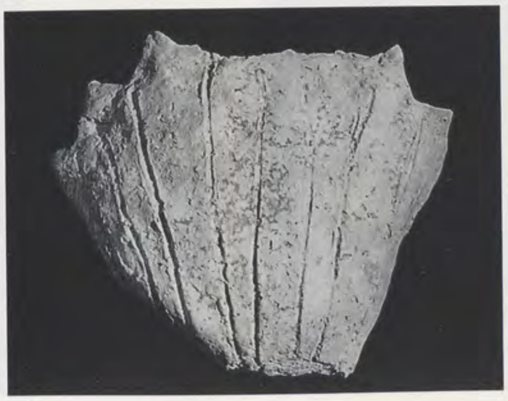
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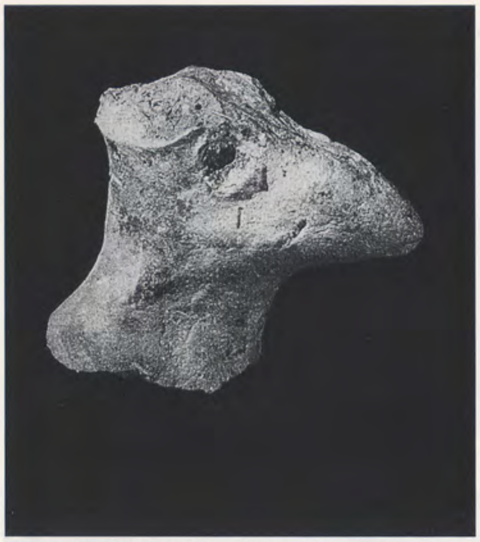
Terracotta Animal Figurines. Period V



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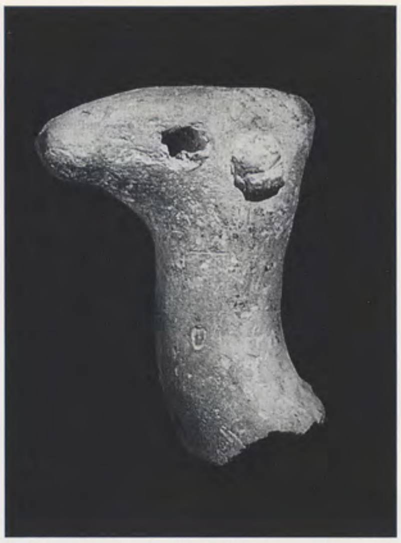

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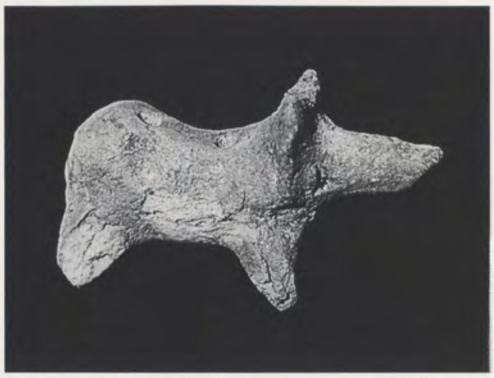

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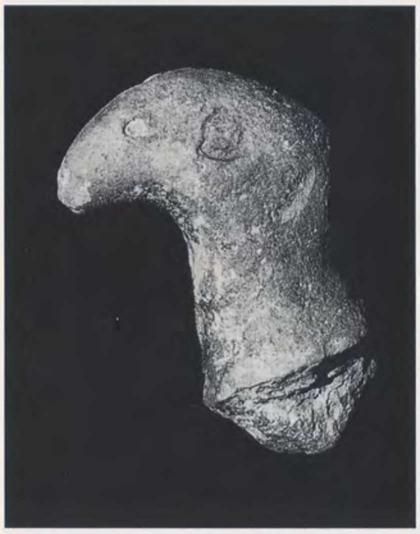

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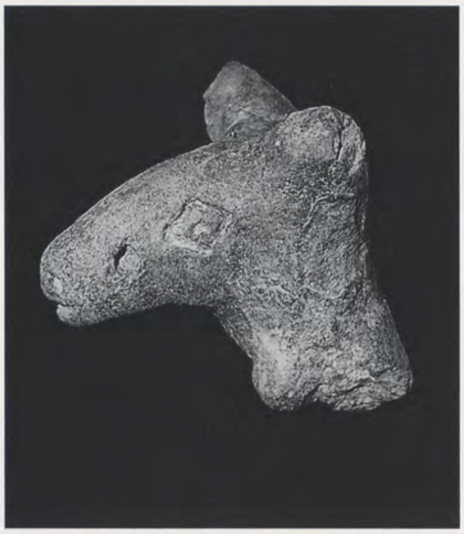

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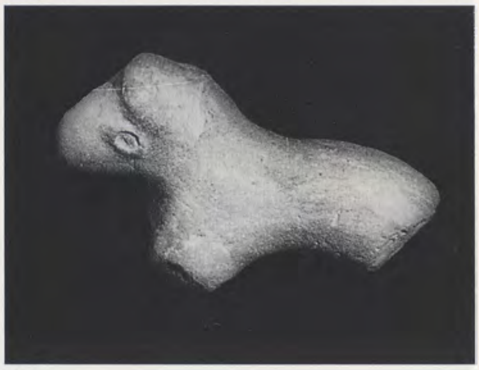

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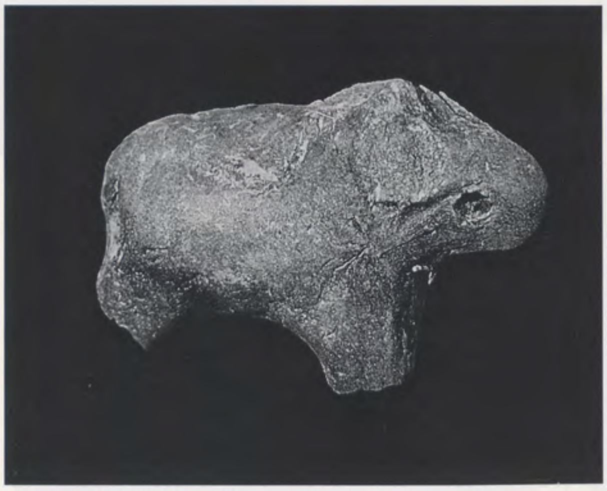

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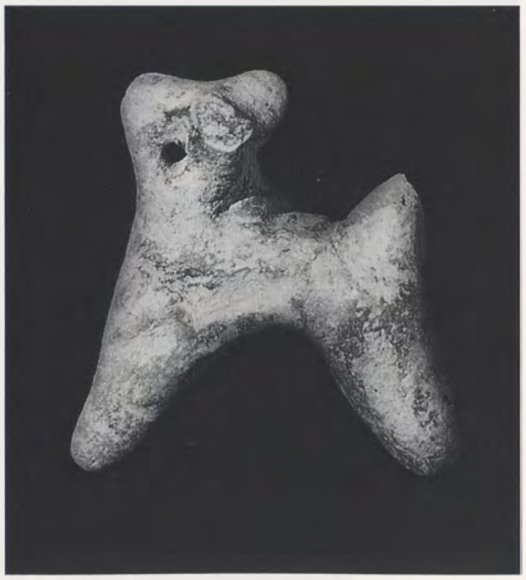

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Terracotta Animal Figurines. Period V

Period VI. Terracotta Animals from Levels 15 to 12

128. Fragment of an elephant with rider (mahout). Trunk and head of rider broken off. Rider's hands stretched out towards the animal's ears. Front legs of the elephant not separately shaped but shown as contracted. Hind legs missing.
H. 6.8 cm. L. 8.2 cm. Colour: brown. No. So III A 412.
FS. 2 V 8.6/Ca 5.7, H. 24.25 m. Gupta. L.15

129. Fragment of an elephant composition moulded at both sides. Elephant obviously in a fighting position with open mouth and raised (but broken off) trunk. Adversary in front of him indistinct.
H. 4.0 cm. L. 6.4 cm. Colour: brown. No. So III A 561.
FS. 2 III 14.1/Cb 13.25, H. 24.25 m. Ca L.15

130. Forepart of a horse. Small head directed downwards. Eyes applied in shape of a broadly rimmed ring. Mane incised as strokes on right side of the neck.
H. 8.7 cm. L. 5.6 cm. Colour: red. No. So III A 604.
FS. 2 IV 13.0–15.0/Ca 15.5–19.5, H. 24.30–24.00 m.
Gupta. L.15

131. Head of same type of horse as no. 130. Mouth slightly opened.
H. 4.0 cm. Colour: red. No. So III A 594.
FS. 2 IV 14.5–16.5/Ca 15.0–19.5, H. 24.70–24.00 m.
Gupta. L.15/14.
Note: Four more specimens of this type of head registered as nos. So III A 414; 818; 1954; 3611.

132. Head of a horse with proudly arched neck and head. A stamped rosette of holes adorns neck and chest. Mane indicated by a crest. Traces of black painted lines on head and body.
H. 5.9 cm. Colour: red. No. So III A 863.
FS.2 V 0.5–1.0/Ca 19.5-Cb 0.5, H. 24.50–24.20 m.
Gupta. L.15/14

133. Horse of the head-type of nos. 130–131. The back might have carried a saddle now chipped off.
H. 5.7 cm. L. 8.6 cm. Colour: red. No. So III A 625.
FS. 2 IV 13.5–15.5/Ca 16.0–19.5, H. 24.20–23.70 m.
Gupta. L.15/14.
Note: Three more specimens of this type registered as finds nos. So III A 960; 1322; 2060.

134. Mutilated horse with saddle. Head broken off. Mane incised as strokes on right side of neck. Body of the animal painted with broad black stripes.
H. 8.0 cm. L. 11.0 cm. Red, black paint. No. So III A 384.
FS. 2 V 17.0–19.0/Ca 10.5–19.5, H. 24.40–24.00 m.
Gupta. L.15.
Note: Eight more specimens registered as finds nos. So III A 92; 173; 897; 961; 962; 1226; 1860; 2002.

135. Headless horse with painted, incised and punched decor. Mane shown on right side of neck only as parallel strokes filled with dots inbetween every second pair of lines. Rich patterns of punched holes all over the body.
H. 7.4 cm. L. 8.0 cm. Red, black paint. No. So III A 433.
FS. 2 V 0.5–2.0/Cb 0.5–4.5, H. 25.00–24.70 m.
Late Gupta. L.13

136. Horse with perforation through neck for fastening a string.
H. 7.5 cm. L. 10.0 cm. Colour: red. No. So III A 892.
FS. 2 III 13.5–19.5/Ca 19.5-Cb 0.5, H. 25.83–25.00 m.
Early Medieval. L.12

137. Horse with crested mane. Eyes applied as disc-like patches with incised stroke.
H. 6.4 cm. L. 7.7 cm. Colour: red. No. So III A 797.
FS. 2 III 19.5/Cb 6.0, H. 25.20–24.80 m.
Early Medieval. L.12

138. Humped bull with straight horns. Legs set broadly apart. Eyes applied as small rings with central prick. Nostrils clearly marked, mouth slightly open. Punched pattern of holes between horns. Perforation through mouth for fastening a string. Hump type 2. Traces of painted black stripes.
H. 9.5 cm. Red slip with black stripes. No. So III A 272.
FS. 2 IV 14.8–17.5/Be 17.0–20.0, H. 25.50–25.10 m.
Gupta. L.15
Note: Twelve more specimens of this type registered as finds nos. So III A 487; 527; 725; 774; 910; 926; 927; 957; 1019; 1029; 1732; 1800.

139. Head of humped bull of the type of no. 138 but with richer decoration by punching holes along the horns and application of a ring between horns.
H. 3.1 cm. Colour: red. No. So III A 1935.
FS. Stray find. Out of context.

140. Humped bull with mutilated head. Hump type 6.
H. 3.9 cm. L. 4.3 cm . Colour: grey. No. So III A 578.
FS. 2 IV 16.5–19.5/Ca 0.5–2.5, H. 24.30–24.00 m.
Gupta. L.15.
Note: One more specimen registered as find no. So III A 455.

141. Extremely small humped bull. Hump type 1.
H. 2.0 cm. L. 2.0 cm. Colour: brown. No. So III A 635.
FS. 2 IV 8.3–9.5/Ca 4.0–9.5, H. 24.20–23.85 m.
Gupta. L.15

142. Fragment of a ram. Perforation through head for fastening a string. Incised strokes on neck and right thigh indicating hair.
H. 7.0 cm. L. 6.7 cm. Colour: brown. No. So III A 1010.
FS.2 IV 11.0/Cb 19.5, H. 23.67–23.37 m.
Late Kuṣāṇa/ Late Gupta. L.16–13

143. Fragment of an indefinite object with the depiction of a buffalo with striped horns.
H. 6.3 cm. Colour: red. No. So III A 560.
FS. 2 IV 13.6/Ca 9.4, H. 24.00 m. Gupta. L.15

144. Head and neck of a swan (?). Beak broken off. Eyes applied as round discs.
H. 8.0 cm. Colour: light brown. No. So III A 991.
FS. 2 IV 9.5–10.5/Ca 19.5-Cb 0.5, H. 25.21–24.91 m.
Early Medieval. L.12

145. Head and neck of an indefinite animal (fawn?). Ears applied in shape of flat discs, eyes incised as circles, mouth perforated for fastening a string.
H. 5.5 cm. Colour: red. No. So III A 582.
FS. 2 III 10.0/Cb 19.0, H. 24.30–24.00 m. Ca Gupta. L.15

146. Small dog. Perforated eyes, upright ears and tail.
H. 5.5 cm. L. 4.8 cm. Colour: brown. No. So III A 1009.
FS. 2 IV 10.5/Cb 9.5, H. 24.81–24.51 m.
Late Gupta/ Early Medieval. L.13.
Note: Four more specimens of same type registered as finds nos. So III A 432; 583; 1934; 1937.

147. Fragment of a terracotta relief with the depiction of a Makara with human leg on his back. Already described under HUMAN FIG., no. 186

H. 19.0 cm. B.19.0 cm. Brick-red. No. So I 127.
FS. 2 V 10.2/Ca 6.15, H. 24.50 m. Gupta. L.14

148. Fragment of a cobra-hood. Tip of mouth pierced. Eyes applied as flat discs. Vertically incised lines on the front side of the extended hood.
H. 2.9 cm. B.4.6 cm. Colour: brown. No. So III A 490.
FS. 2 V 5.0–7.0/Ca 16.5–19.5, H. 24.20–23.90 m.
Gupta. L.15

149. Mutilated animal (fox?). Long stretched body and tail. Mouth broken short.
H. 4.2 cm. L. 9.7 cm. Brick-red. No. So III A 536.
FS. 2 III 19.8/Be 19.95, H. 24.55 m. Ca L.14

150. Lion. Flat face showing two semicircles with one applied eye each. Mouth slightly open. Body and three legs broken off.
H. 7.5 cm. Colour: brown. No. So III A 243.
FS. 2 IV 5.5–9.5/Be 14.5–17.5, H. 25.80–25.10 m.
Late Gupta. Ca L.14

151. Lion similar to no. 150 but with more elaborate face.
H. 5.6 cm. Colour: grey. No. So III A 732.
FS. Surface find. Out of context.

152. Small bull crouchant on flat base.
H. 4.1 cm. L. 4.0 cm. Colour: red. No. So III A 621.
FS. 2 IV 0.5–4.0/Cb 0.5–9.5, H. 24.70 m.
Late Gupta/ Early Medieval. L.13.
Note: One more specimen of this type registered as So III A 522.

153. Hollow bull being used as a rattle. Made by two moulds. Sharp pointed horns, slightly opened mouth.
H. 8.2 cm. L. 7.5 cm. Colour: brown. No. So III A 585.
FS. 2 IV 2.85/Cb 2.77, H. 24.45 m. Late Gupta. L.13
Note: One more specimen registered under no. So III A 503.

Period VII. Terracotta Animals from Levels 11 to 8

154. Mutilated moulded bull crouchant on a flat base.
H. 3.3 cm. L. 3.4 cm. Colour: brown. No. So III A 262.
FS. 2 IV 4.98/Ca 15.2, H. 25.20 m. Medieval. L.11
Note: Three more specimens registered as finds nos. So III A 2012; 2013; 2025.

155. Horse with saddle. Head-type as no. 133 but eyes indicated by slits. Mane strokes on right side. Perforation through crest for fastening a string.
H. 6.8 cm. L. 8.9 cm. Red with mica. No. So I 96.
FS. 2 IV 17.3/Cb 0.5, H. 25.65 m. Medieval. L.10
Note: Two more specimens of heads of same type registered as finds nos. So III A 211; 430.

156. Humped bull. Perforation through neck. Hump type 9.
H. 5.0 cm. L. 6.0 cm. Colour: brown. No. So I 8.
FS. Trench 1. D 10. H. 26.00 m. Medieval. Ca L.10

157. Neck and head of an animal (camel?). Ears broken off. Mouth slightly open. Black stripes.
H. 4.2 cm. Colour: red, black paint. No. So III A 224.
FS. 2 V 4.6–7.0/Ca 0.5–9.5, H. 25.60–25.20 m.
Late Medieval. L.9

158. Mutilated plaque of four-armed Gaṇeśa seated on a flat base. Two hands on stomach, two arms raised.
H. 7.0 cm. Colour: brown. No. So III A 1002.
FS. Filling. Out of context.

Period VIII. Terracotta Animals from Levels 7 to 1

159. Fragment of a dog. Ears uplifted, eyes applied in shape of discs with central prick. Perforation through mouth for fastening a string. Necklace of twisted ribbon. Legs broken off.
H. 4.3 cm. Colour: red. No. So III A 156.
FS. 2 V 10.5–15.0/Ca 12.0–19.5, H. 26.00–25.50 m.
Jat. L.7/6
Note: Two more specimens registered as finds nos. So III A 108; 545.

160. Horse with rider. Hollow and partly wheel-made.
H. 14.1 cm. L. 12.7 cm. Colour: red. No. So I 102.
FS. 2 IV 19.9/Cc 14.06, H. 25.35 m (pit from 6). Jat. L.6

161. Neck and head of a moulded hollow horse.
H. 4.8 cm. Colour: red. No. So III A 88.
FS. 2 IV 10.5–14.0/Cb 0.5–9.0, H. 27.75 m.
Jat. L.4–2
Note: Five more specimens of same type registered as finds nos. So III A 55; 70; 110; 116; 166.

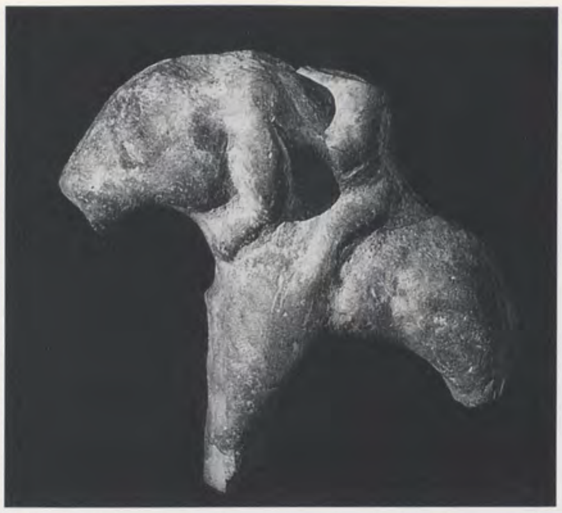
162. Head of a bull. Moulded and hollow. Right horn broken off.
L. 5.1 cm. Colour: red. No. So III A 77.
FS. 2 IV 14.0–19.5/Ca 10.5–19.5, H. 27.50 m.
Jat. L.3

163. Neck and head of a goose. Moulded and hollow.
H. 6.5 cm. Colour: red. No. So III A 3515.
FS. 2 IV 12.0–15.5/Be 4.5–7.4, H. 26.55–26.25 m.
Jat. L.6

164. Fragment of a dog with pointy ears. Eyes inserted as a perforation.
H. 3.9 cm. L. 6.3 cm. Colour: red. No. So III A 78.
FS.2 IV 17.0–19.5/Cb 0.5–10.0, H. 28.00 m. Jat. L.2

165. Head of an animal with large applied ears and incised strokes. Mouth slightly open.
H. 7.3 cm. Colour: grey-brown. No. So III A 2570.
FS. Surface find. Out of context.

166. Fragment of an indefinite animal (horse?). Long mouth, uplifted ears. Two punched circles as decoration (?) on forehead. Eyes pricked. Where legs begin vertical strokes are incised nearly parallel.
H. 7.0 cm. Colour: red. No. So III A 198.
FS. Surface find. Out of context.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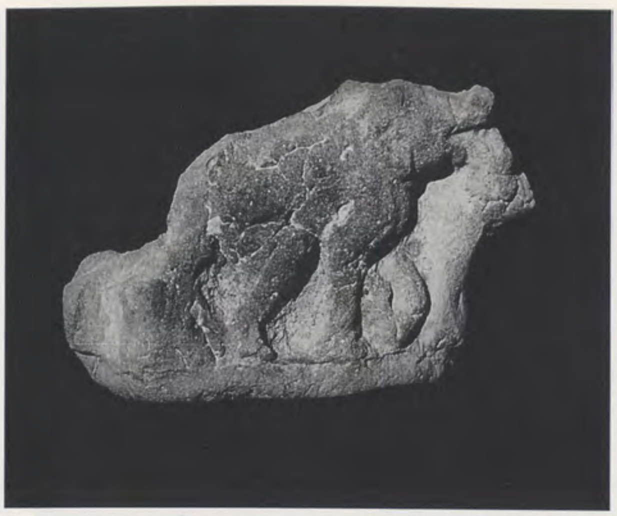
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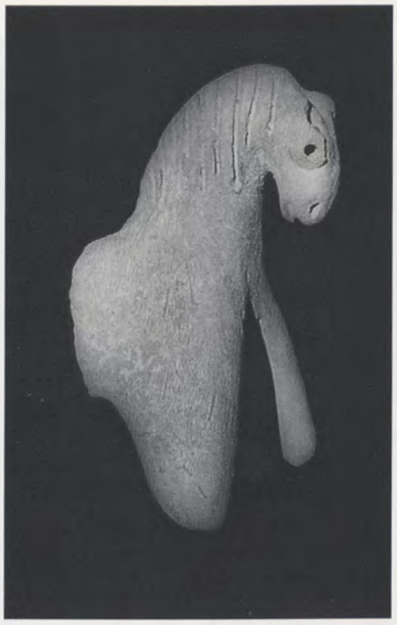
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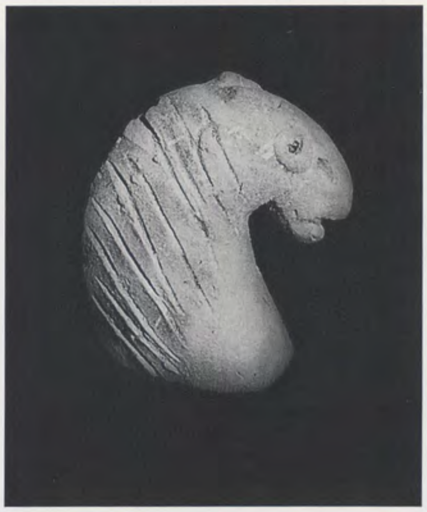
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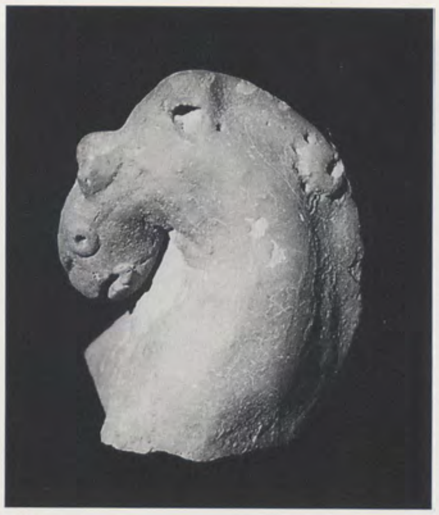
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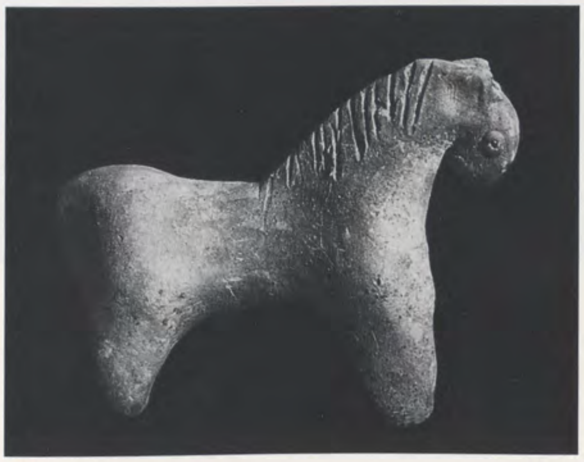
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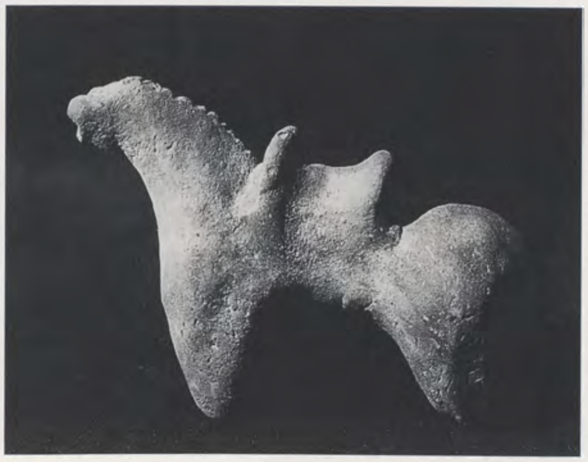
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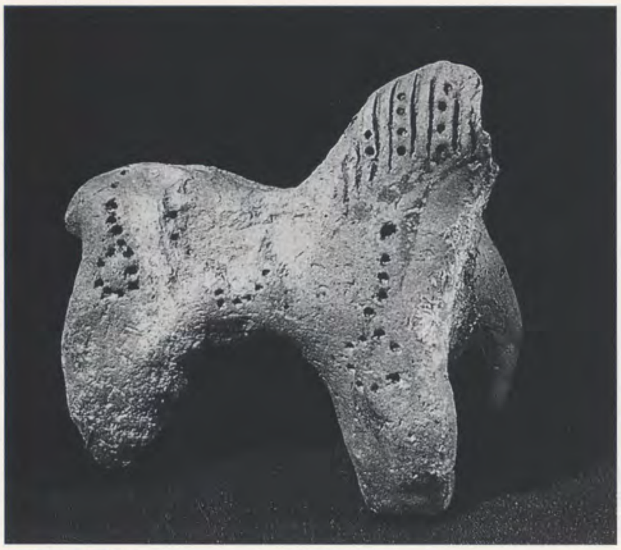
Terracotta Animal Figurines. Period VI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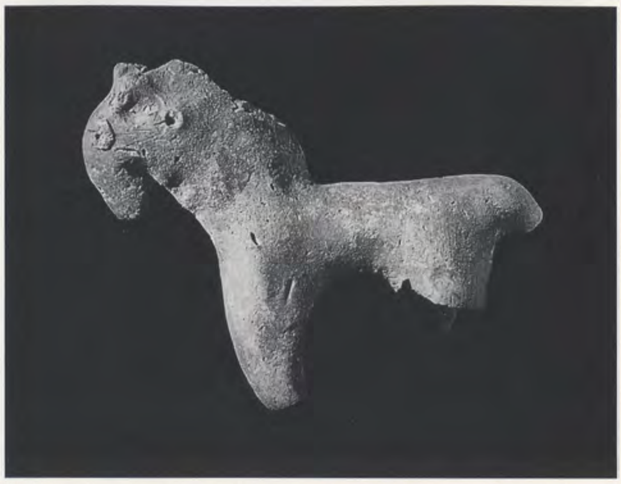
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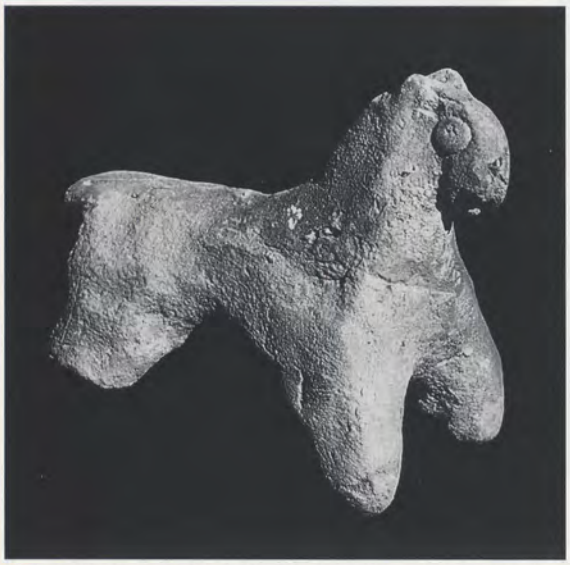
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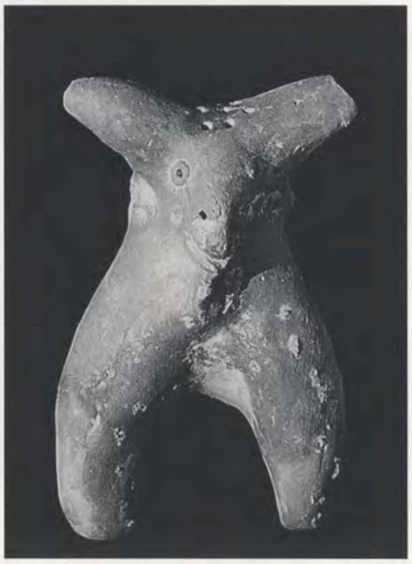
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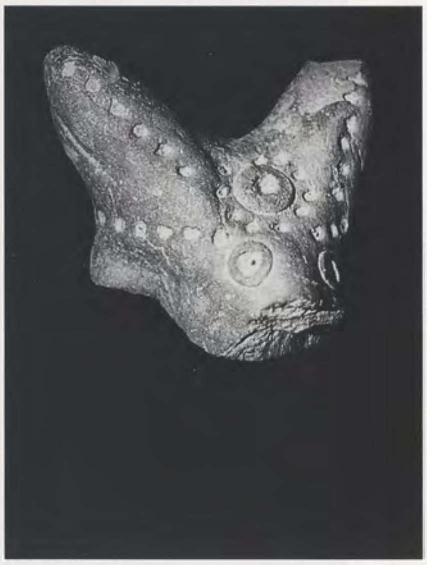
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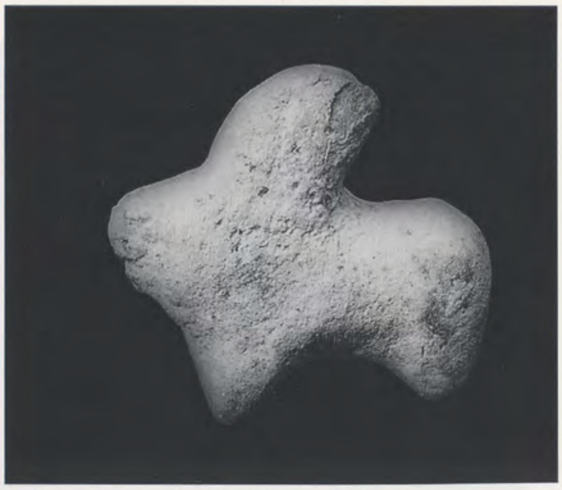
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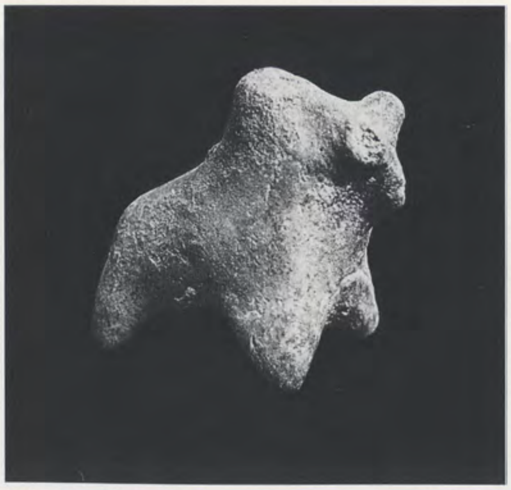
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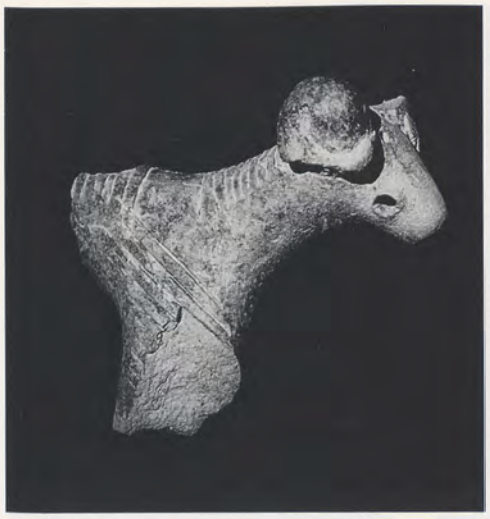
Terracotta Animal Figurines. Period VI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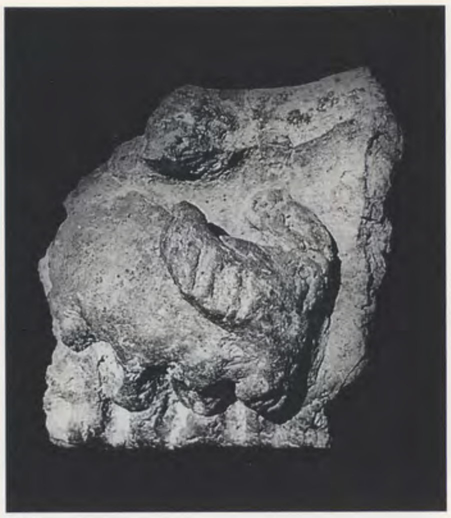
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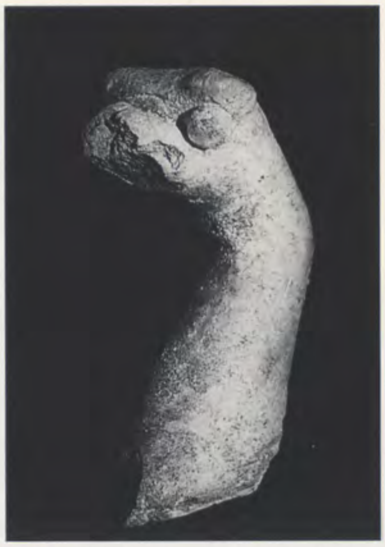
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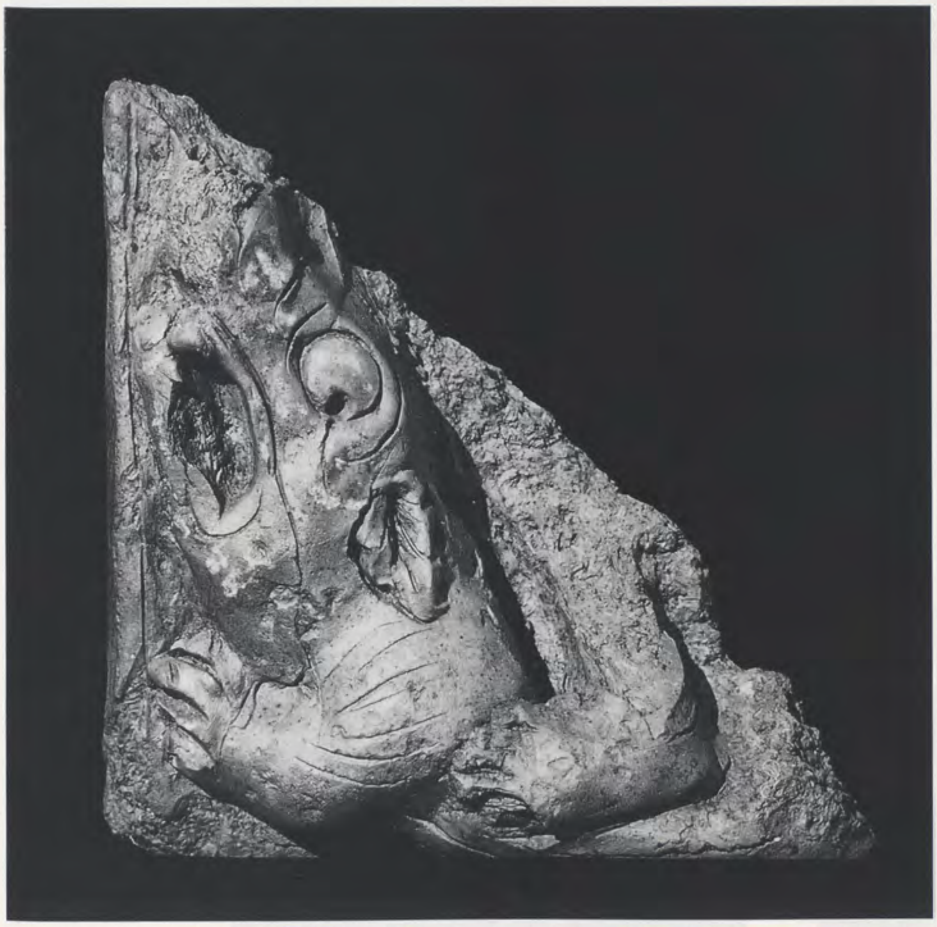
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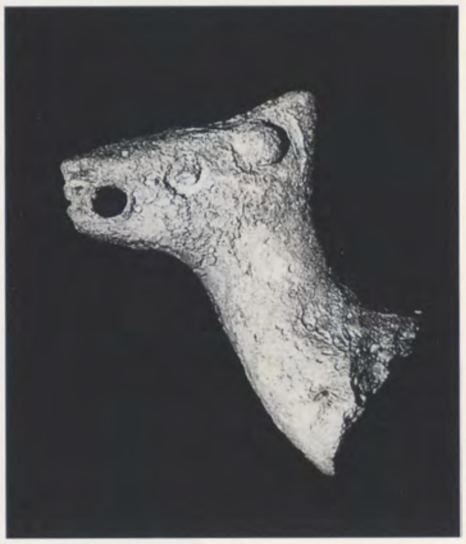
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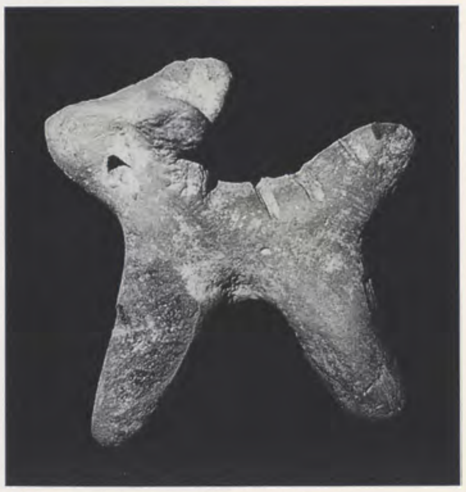
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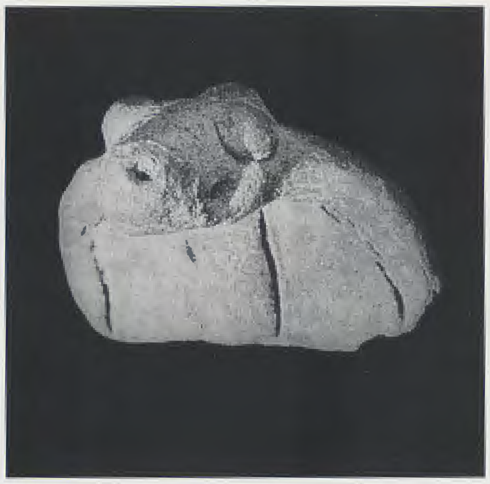
Terracotta Animal Figurines. Period VI



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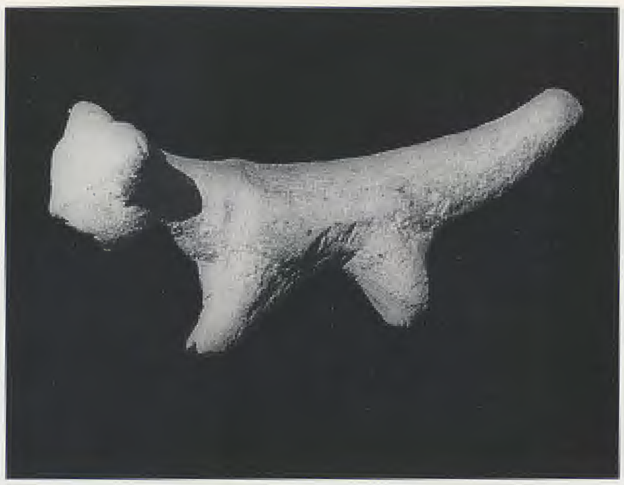

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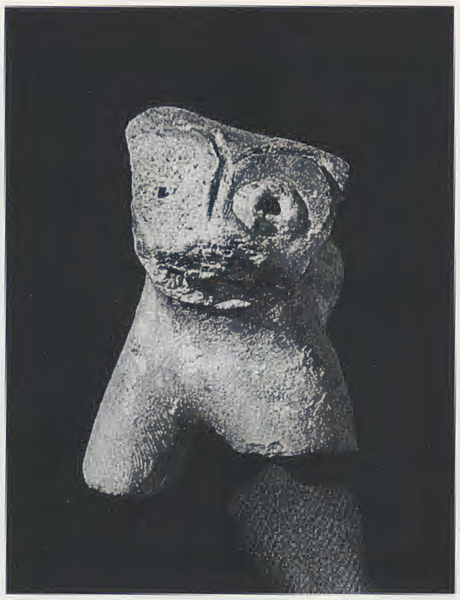

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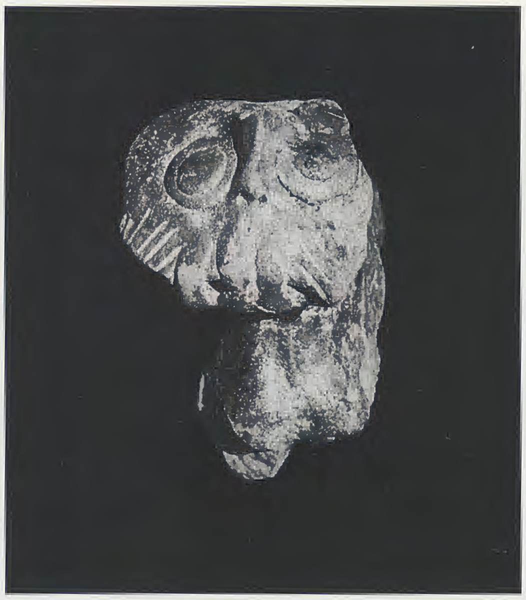

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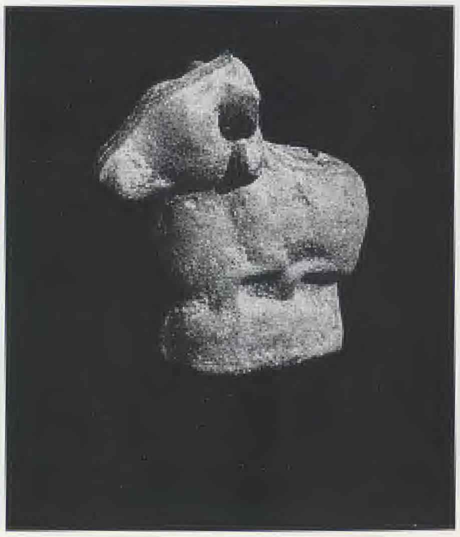

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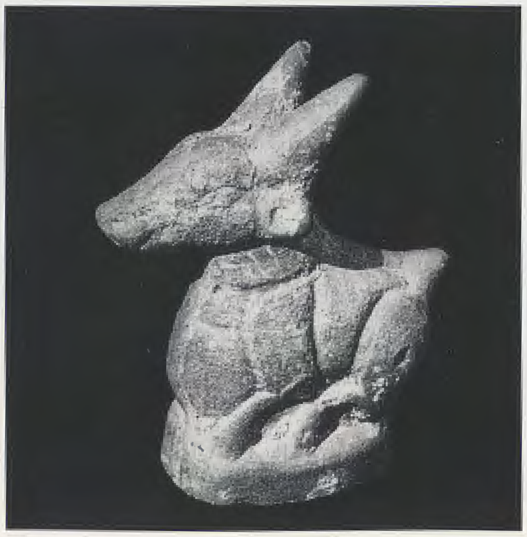

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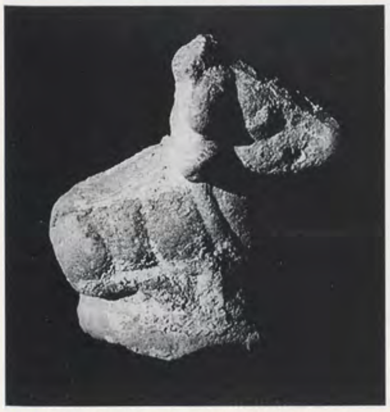
Terracotta Animal Figurines. Period VI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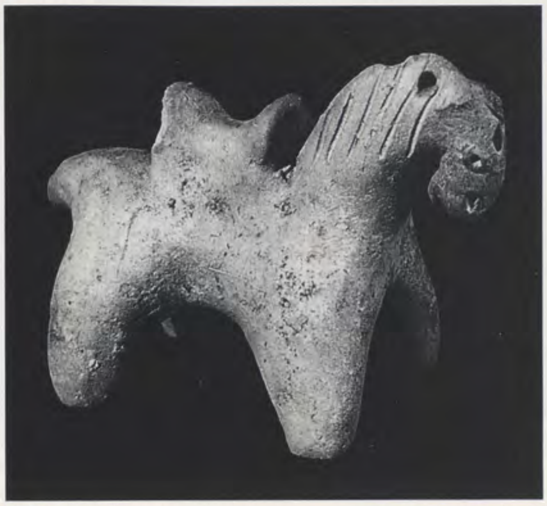
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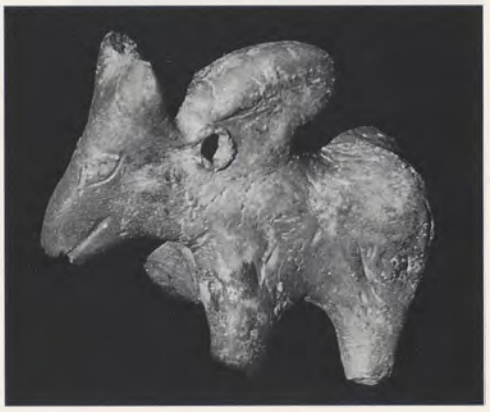
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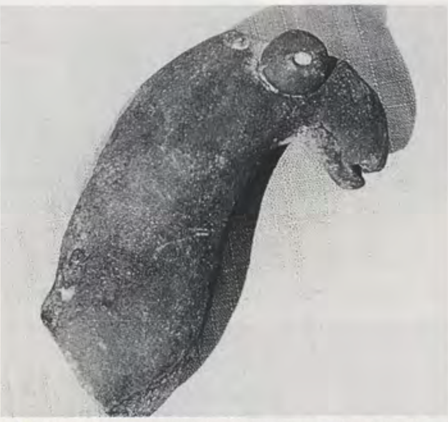
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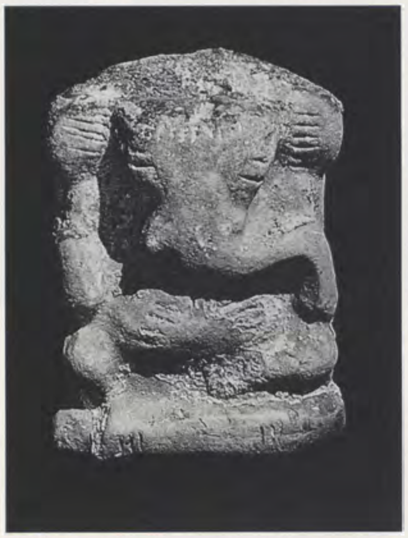
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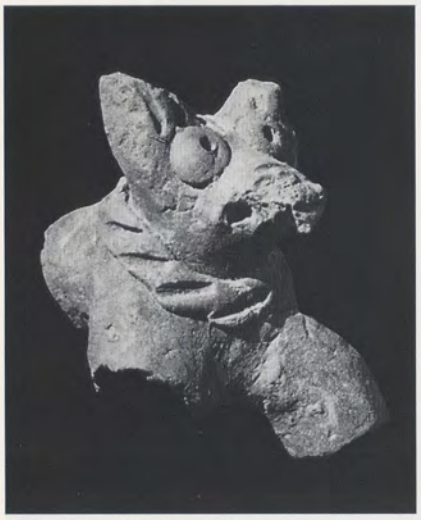
Terracotta Animal Figurines. Period VII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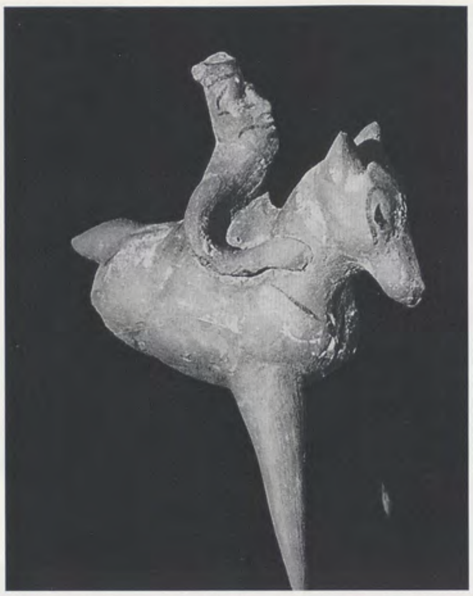
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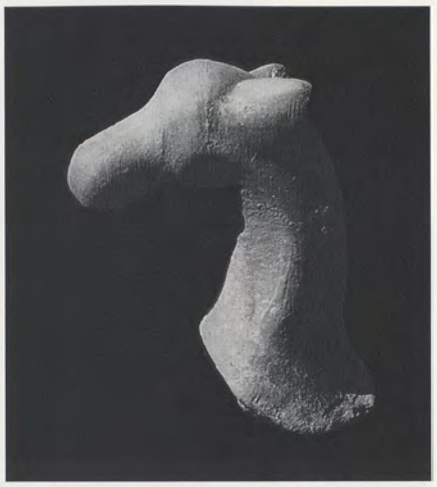
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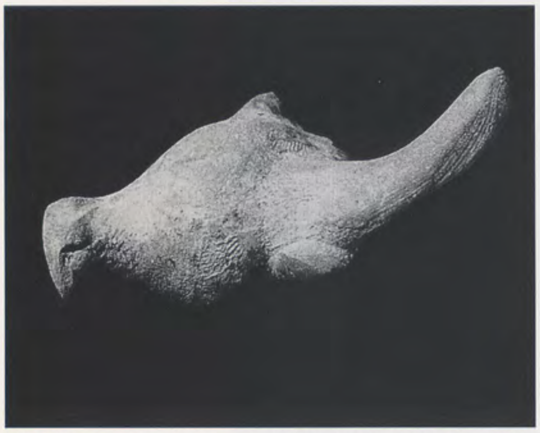
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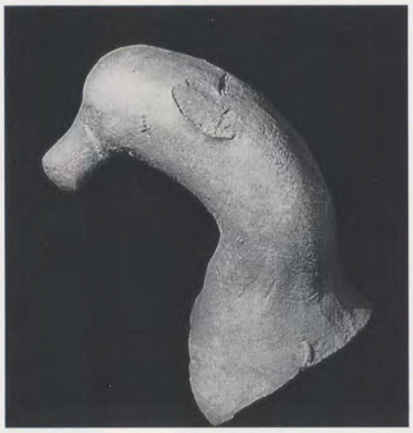
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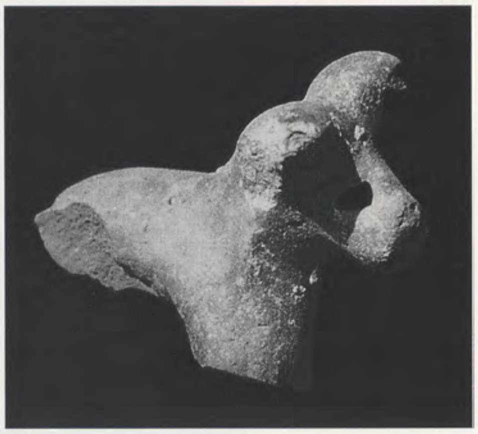
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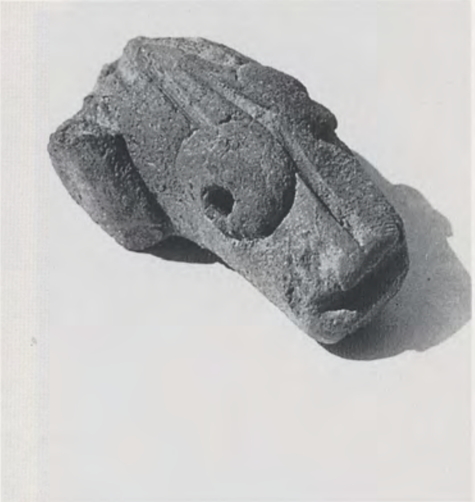
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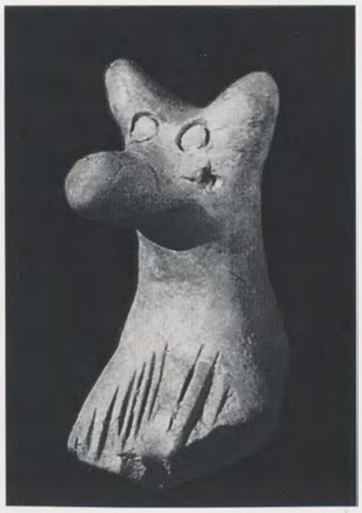
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Terracotta Animal Figurines. Period VIII

3. Miscellaneous Terracotta Objects

Votive Tanks

The excavations at Sonkh yielded altogether 266 fragments of votive tanks. Most of these objects consist of small pieces like parts of the tank wall with lamp or bird on the rim, with a ladder applied to the wall or of fragments of the tank bottom with the depiction of aquatic animals like snake, frog and fish or with remains even of seated human figures. Fortunately, a sufficient number of more complete vessels permits to differentiate between several varieties of votive tanks and to allot most of the fragments to their respective type. A selected group of better preserved tanks and details of such may represent and characterize these types.

The use of votive tanks for performing *pūjā* in the homes of people is not restricted to a short period as often meant. The finds at Sonkh cover the span of time from period II to period VII, i.e. more than a millennium. While a few fragments suggest the starting of votive tank *pūjā* as early as the Mauryas, the end is represented by two tanks of the late type found in level 11, belonging to the medieval period. But the bulk of the finds hails from period III, the time of the Mitras of Mathura in the first century BC which proved to be the most inventive phase for votive tanks.

The main types of votive tanks can be categorized as follows:

A. Round, wheel-made bowl with extended rim and an arbitrary number of lamp-cups applied to it. Inside of bowl just plain (e.g. nos. 1–3).

B. Rectangular or square water-tank with birds and lamps upon the rim and with an integrated building (temple) placed on a platform which is supported by pillars and can be reached by a staircase. A thick stem of lotus stands upright with opened blossom, to swim on the water when the tank was filled. On the ground, figures of snake, frog or fish are applied (e.g. no. 6). Subvariety: Round basin with temple integrated on the ground (no. 12)

C. Single type of a tank with houses built around a court (no. 13).

D. Round vessel with or without lamps upon rim, with a ladder applied to the inner wall and with snake, fish or frog depicted on the ground (e.g. no. 14).

E. Rectangular tank with Mother Goddesses seated along the inner wall carrying a child in their arm and a bowl in their lap (e.g. no. 16). Kṣatrapa/Kuṣāṇa version.

F. Round, wheel-made bowl with four birds on the rim and snake and frog on the ground. No ladder (e.g. no. 22). Kuṣāṇa only.

G. Rectangular tank with a spout, three ladders on the inner wall and a snake applied to the ground (nos. 26). Medieval version.

The majority of fragments from votive tanks found at Sonkh belong, as already mentioned, to a period prior to the Kṣatrapa levels 24/23. All but one of the lamp-and-bird type were intended to be filled with water as is proved by the placing of snake, frog and fish so often on the bottom of the vessel and by a stem of lotus, the open petals of which are meant for lying on the water when the tank is filled. The only exception is type C, a tank with houses arranged in the square but without a human figure in it. Votive tanks equipped with human figures seated along the inner walls in the mostly rectangular vessels firstly appear with the Kṣatrapas. This type has been copied in the Kuṣāṇa period at Sonkh but vanished soon. The water-tank remains the main type of votive tank till the end of finds in the medieval period.

Period II. Votive tanks from Levels 36 to 29

There are seven small fragments of votive tanks, such as lamp-cups, wall-piece with ladder and a bottom piece with applied frog. All of them seem to come from round vessels. One piece with ladder has been found in a well used in level 34 only. This material points to an early use of votive tanks but does, in our opinion, not yet provide sufficient evidence for a final conclusion. The objects in question are registered as finds nos. So III A 1996; 1978; 3079; 3025; 2724; 2210; 3601.

Period III. Votive tanks from Levels 28 to 24

1. Round, wheel-made vessel with slantingly extended rim on which four lamp-cups are applied. The original number of lamps might have been eight.
Ø 15.8 cm. Colour: brick-red. No. So II 2234.
FS.3 I 6.0/Ca 16.7, H. 17.80 m. Early Mitra. L.28

2. Mutilated round votive tank. Wheel-made. Sharp-edged broadly extended rim on which twelve lamp-cups are preserved.
Ø 28.0 cm. H. 9.2 cm. Colour: brown. No. So III A 3710.
FS. 2 V 10.5–11.7/Cc 4.4–5.0, H. 18.45–18.35 m.
Mitra. L.26

3. Fragment of a votive bowl with extended rim and two lamp-cups.
H. 4.4 cm, L. 10.8 cm. Colour: brown. No. So III A 3064.
FS. 2 V 16.5–17.0/Cb 0.3–2.2, H. 18.75–18.45 m.
Mitra. L.25
Note: Further specimens of comparable rims with lamps registered as finds nos. So III A 1896; 1979; 3035; 3261; 3455; 3707.

4. Fragmentary rectangular votive tank with one lamp-cup preserved on the rim. Spots of fracture prove it to be a tank of type 2 with integrated temple and applied snakes etc on the ground. A whitish mark indicates the water level of the filled vessel. The fracture spots to the left of the lamp are remains of the platform fastened to the wall. The stub on the ground marks the end of the ladder reaching to the platform (cp. no. 6)
25.6 × 27.5 × 9.0 cm. Red-brown. No. So III A 2689.
FS. 2 V 10.5/Ca 15.6, H. 18.36 m. Mitra. L.27
Note: Further specimens of this type registered under So III A 2317; 2893.

5. Fragment of a votive tank with integrated temple on a pillar-supported platform.
27.5 × 27.0 × 9.6 cm. Brown. No. So III A 3081.
FS. 2 V 12.5/Ca 19.5, H. 18.20 m. Mitra. L.27

6. Mutilated votive tank of type B. The now widely damaged rims of the enclosure walls were originally carrying lamps and birds in regular intervals. Aquatic animals like snake, fish and frog are applied to the bottom of the vessel. A strong stalk-like pillar carries a lotus rosette in full bloom, which is to be imagined as floating on water. A platform rests on four thick columns as well as on one side of the wall. A ladder leads down to the ground of the vessel. An oval temple, now roofless, stands on the platform.
This vessel was used for the *pūjā* in a private house. Shaped as a water tank and showing a ladder from the ground to the platform, the belief that here a water-god was worshipped may be justified. It is even possible that this vessel was used for a *Nāga* ritual.
32.0 × 36.0 × 14.5 cm. Dirty brown. No. So I 275.
FS.2 V 2.1/Ca 14.0, H. 19.55 m. Late Mitra. L.25/24
Note: Further fragments of this type of votive tank are registered under nos. So I 247; So III A 2684; 3368.

7. Full-blown lotus on a thick stalk, from the bottom of a votive tank of type 2.

H. 8.7 cm. Colour: dirty grey. No. So III A 2322.
FS. 2 V 16.3/Ca 14.0, H. 19.65 m. Kṣatrapa. L.24
Note: Further lotus stalks of votive tanks of this period registered under So III A 2245; 3028.

8. Temple of a votive tank in the shape of a circular tent with pointed roof. The building rested on two columns one of which is preserved. The rear part was, as indicated by a fracture line on the base, fixed to the wall of the tank. The platform on which the building stands is broken away all around.
H. 14.9 cm. Temple 9.1 cm. Colour: light brown.
No. So I 10. FS. Trench 1, B. 35, H. 18.20 m.
Mitra. L.27

9. Fragment of a votive tank temple in shape of a hut. Platform broken away around the base of the building.
H. 7.5 cm. Colour: red. No. So I 222.
FS. 3 I 4.0–7.3/Ca 13.0–15.5, H. 18.95–18.65 m.
Mitra. L.26

10. Fragment of a small temple from a votive tank. Entrance modelled like a curved arc with three pinnacles. In the lower part the building was decorated with incised horizontal strokes.
H. 14.8 cm. Colour: red-brown. No. So III A 3109.
FS. 2 V 9.5–10.5/Cb 5.2–9.5, H. 19.40–19.22 m.
Kṣatrapa. L.24

11. Triangular temple from a votive tank. Platform missing. Two pinnacles on the ridge of the roof.
H. 5.8 cm. L. 6.2 cm. Colour: red. No. So III A 1975.
FS. 3 I 5.0–7.0/Ca 13.5–17.4, H. 19.60–19.40 m.
Late Mitra. L.25
Note: Two further specimens of this temple type registered under So III A 2250; 2251.

12. Fragmentary votive tank. Round basin with integrated round building (temple). On the ground a snake and a bird (or tortoise?). Upon the partly damaged rim of the enclosure one double-lamp is preserved.
H. 6.3 cm. Ø 27.8 cm. Colour: red. No. So I 323.
FS. 2 V 9.6/Ca 2.0, H. 18.95 m. Mitra. L.26
Note: One further fragment with temple integrated in the bottom is to be found registered as no. So III A 1995.

13. Votive tank in the form of a narrow yard with presumably four houses clustering around it. Three of the houses are fully preserved. They have domed roofs with three peaks each which correspond to the pinnacles on stable structures. The houses are joined in a right angle and encircle a small courtyard. Their outer walls merge together with the wall of the vessel. The yard has only one entrance which leads through a passage into the court from where the other houses can be entered. Remains of a staircase in front of the entrance and some markings at the base indicate that, originally, the vessel rested on supports. A tree seems to have grown beside the entrance; traces of its crown are still visible on the roof.
The features characteristic of a tank can only be made out at its corners and by its fractured edges, the use of this object as a votive tank cannot be doubted.
18.5 × 19.5 × 12.0 cm. Colour: red. No. So I 223.
FS. 3 I 3.6/Ca 16.9, H. 18.90 m. Mitra. L.26

14. Round votive tank. Two lamp-cups and traces of a third one are preserved upon the rim of the enclosure. One ladder is applied to the inner wall. On the ground two snakes and one frog are applied.
H. 9.2 cm. Ø 20.5 cm. Colour: brown. No. So III A 3227.
FS. 2 V 14.45/Cb 9.6, H. 18.75 m. Mitra. L.25

15. Round votive tank. Strongly chaff-tempered and hand-made. One ladder applied to the inner wall. Two snakes shaped on the ground.
H. 8.8 cm. Ø 28.7 cm. Red slipped. No. So I 257.
FS. 2 V 16.0/Ca 4.2, H. 19.40 m. Mitra. L.25
Note: Fragments of staircases registered under So III A 3130; 3453.

Period IV. Votive tanks from Levels 24 to 22

16. Fragmentary votive tank with the remaining four of originally seven or eight figures of Mother Goddesses seated on the bottom with a bowl in their lap. As to the figures and the use of the tank see the description under no. 79 of the human terracotta figurines.
26.0 × 26.0 × 14.8 cm. Colour: brown with red slip.
No. So I 325. FS. 2 V 1.3/Cc 5.5, H. 18.85 m.
Early Kṣatrapa. L.24

17. Mutilated basin of a votive tank of type B. Remains of two birds upon the rim of the enclosure walls. Fracture mark at the spot where the temple platform joined the walls and two stubs on the bottom, indicating columns which originally supported the structure. No aquatic animals on the ground.
31.3 × 24.5 × 9.6 cm. Colour: red. No. So III A 2688.
FS. 2 V 13.9/Cb 11.9, H. 19.25 m. Kṣatrapa. L.23

18. Fragment of a round votive tank with traces of two lamp-cups and a ladder applied to both sides of the wall.
H. 9.6 cm. L. 20.8 cm. Colour: red. No. So III A 3304.
FS. 2 IV 14.5–2 V 0.5/Ca 7.0–9.5, H. 20.35–20.05 m.
Kṣatrapa. L.23
Note: Further fragments with ladders on both sides registered as finds nos. So III A 1977; 3347.

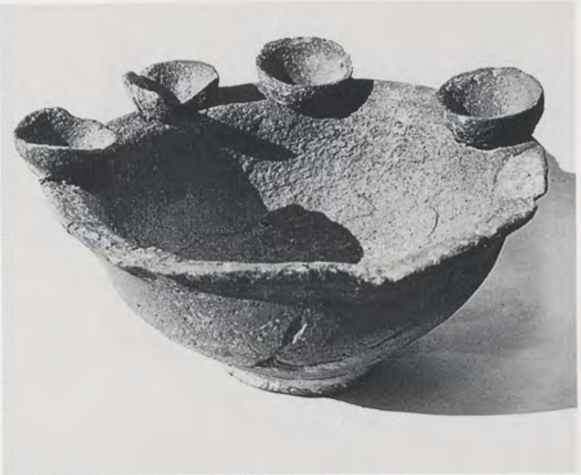
Period V. Votive tanks from Levels 22 to 15

19. Fragmentary votive tank with four figures seated in rows of two on opposite sides of the enclosure. Three of the figures are preserved, of the fourth only traces are visible.
23.0 × 18.0 × 4.5 cm. Colour: brown. No. So III A 2037.
FS. 3 I 2.6/Cb 2.0, H. 20.63 m. Early Kuṣāṇa. L.21

20. Fragment of a votive tank with seated human figure of primitive shape.
H. 6.6 cm. B. 9.0 cm. Colour: red. No. So I 306.
FS. 2 IV 8.6/Ca 14.5, H. 21.60 m. Kuṣāṇa. L.21
Note: Further fragments of seated human figures from votive tanks of this period registered under So III A 2190; 3168.

21. Votive bowl. Wheel-made. Surface of vessel strongly grooved. Remains of a bird (?) upon broad rim.
Ø 28.4 cm. Colour: brick-red. No. So II 2129.
FS.3 I 3.6/Cb 0.4, H. 20.40 m. Early Kuṣāṇa. L.22/21
Note: Further fragments of this type of bowl registered as finds nos. So II 1989; So III A 2295; 2368; 2817.

22. Votive bowl with four birds upon broad rim. Wheel-made, grooved as no. 21. On the ground a snake, frog and fish.
Ø 29.8 cm. Colour: brick-red. No. So I 199.
FS. 2 V 10.5/Cb 4.5, H. 21.85 m. Kuṣāṇa. L.20
Note: Further fragments of votive bowls of this type registered under So II 2098; So III A 1669; 2710.



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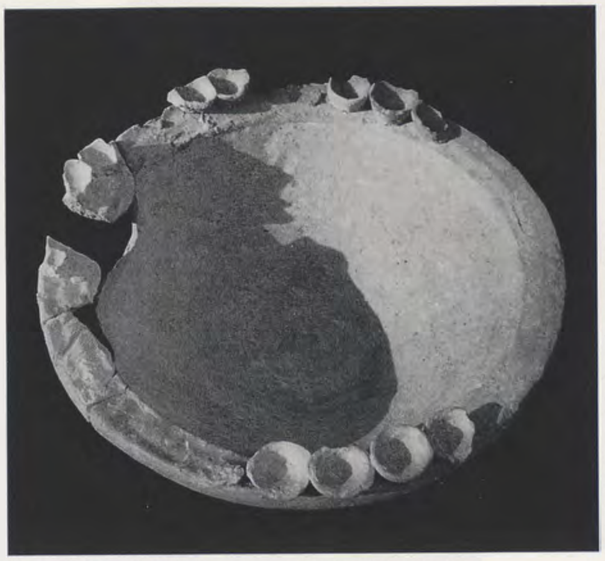

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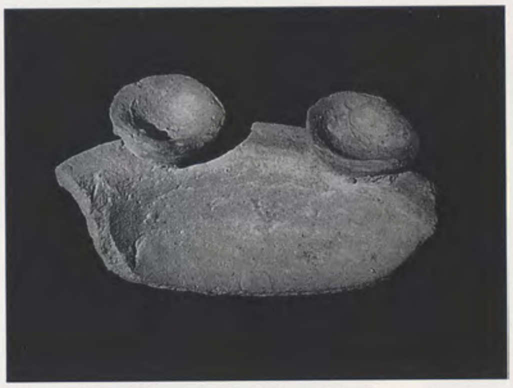

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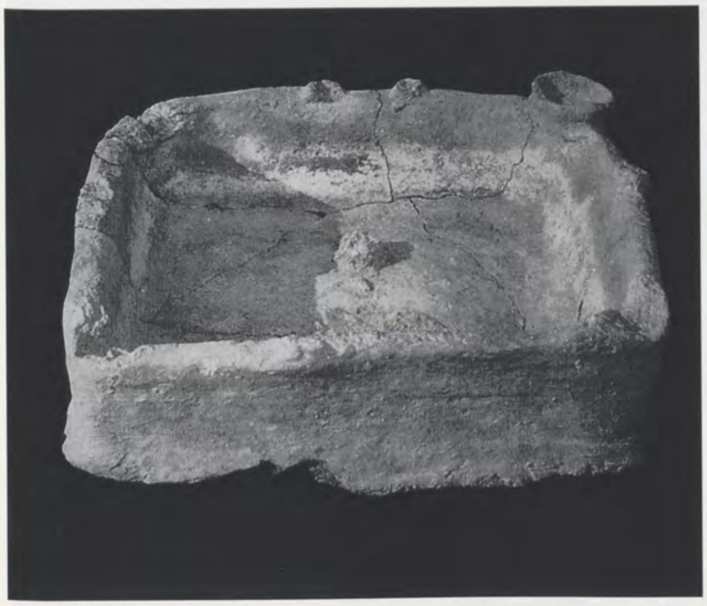

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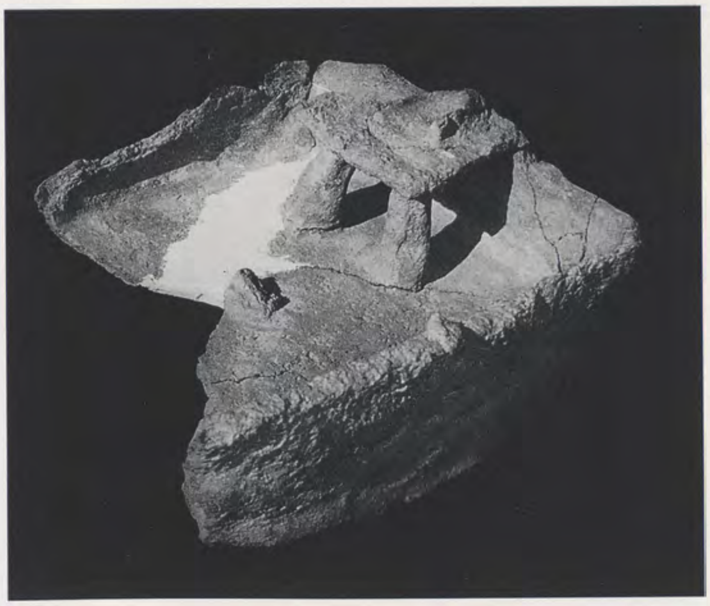

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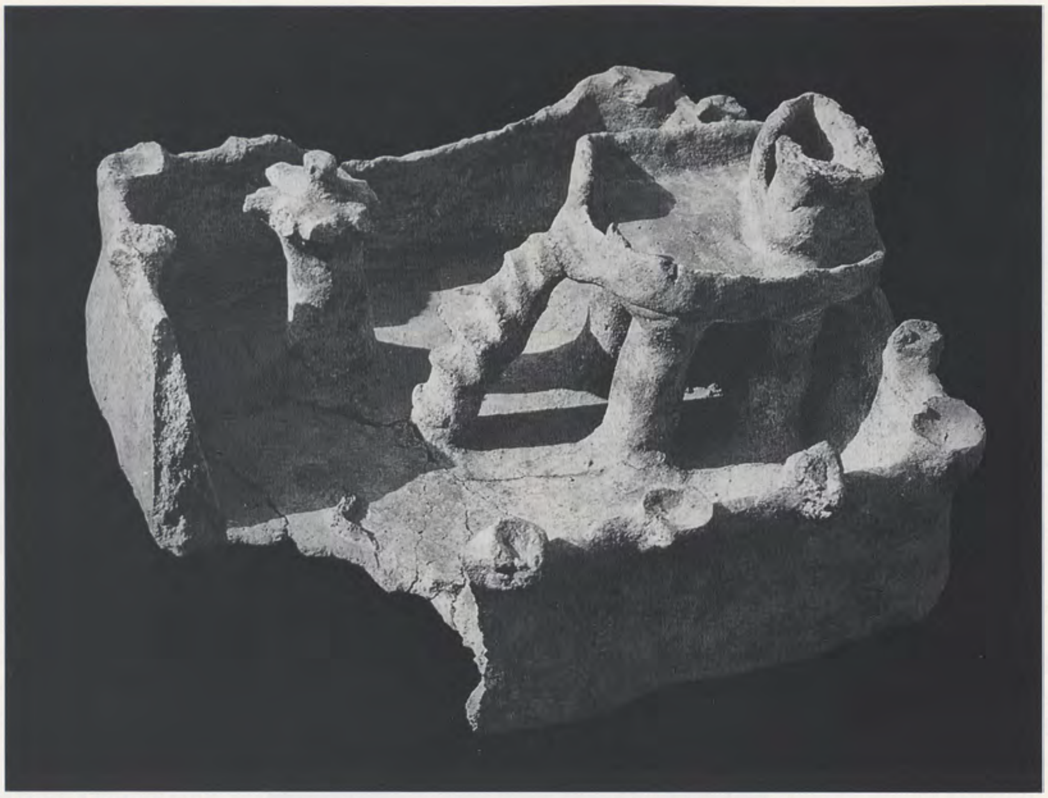
Terracotta Votive Tanks. Period III



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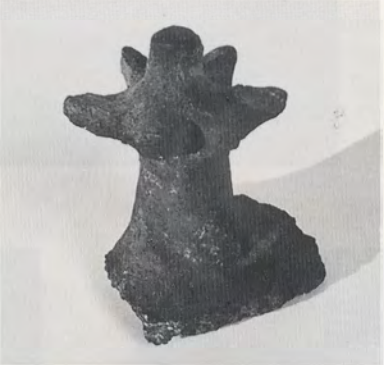

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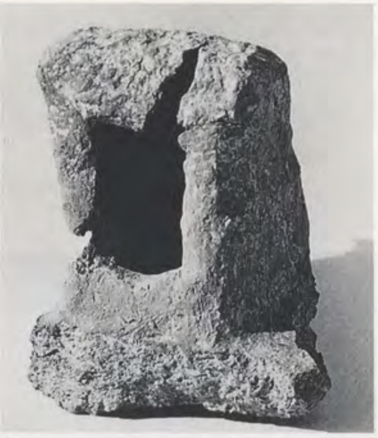

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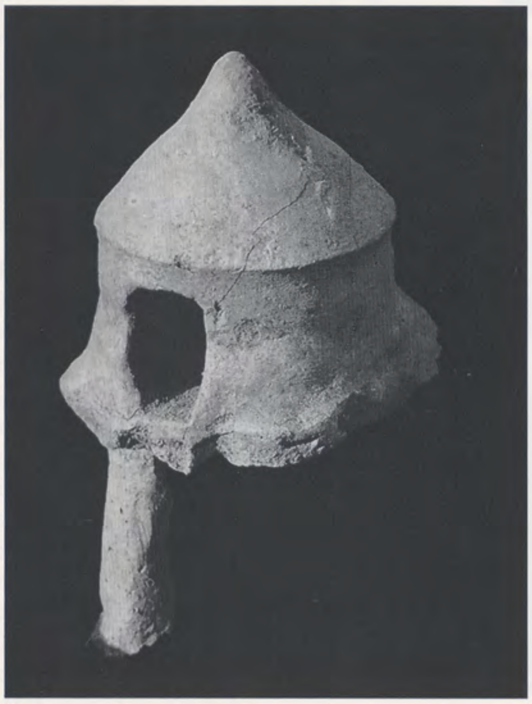

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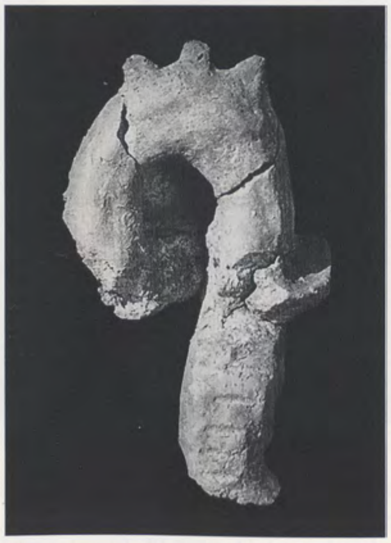

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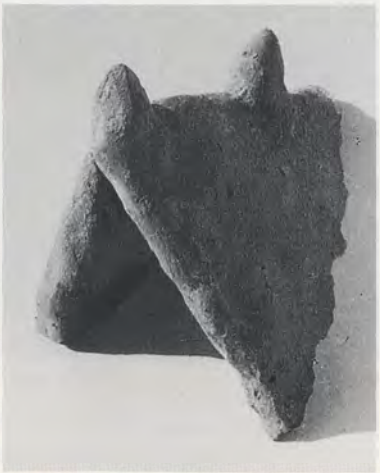

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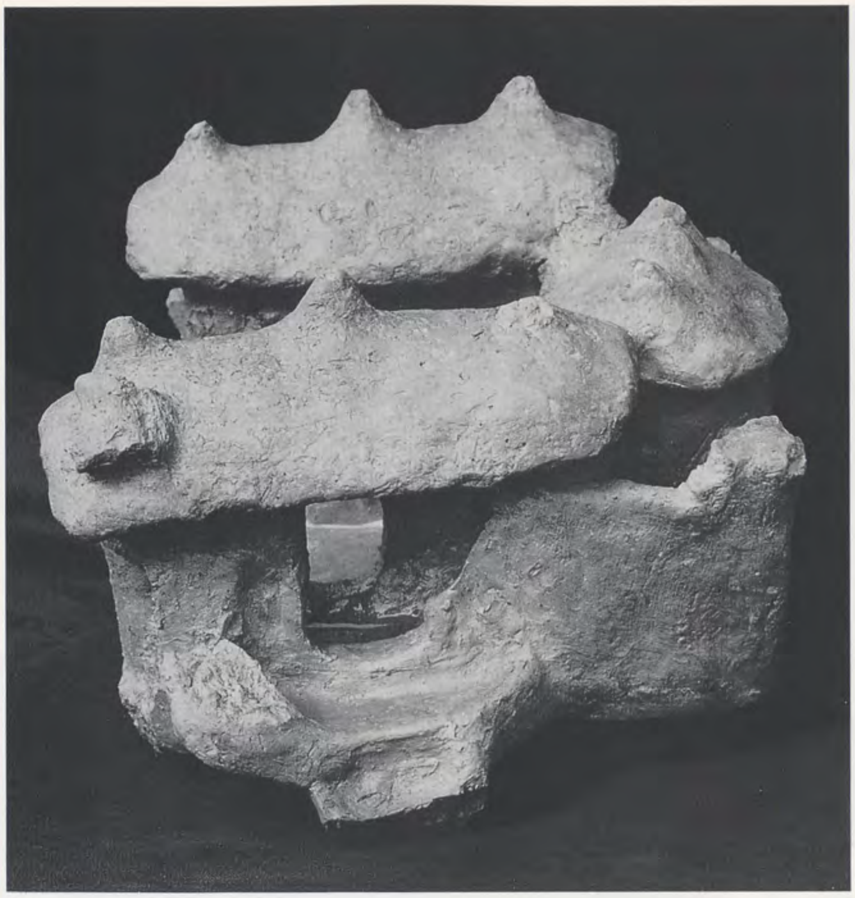
Terracotta Votive Tanks. Period III



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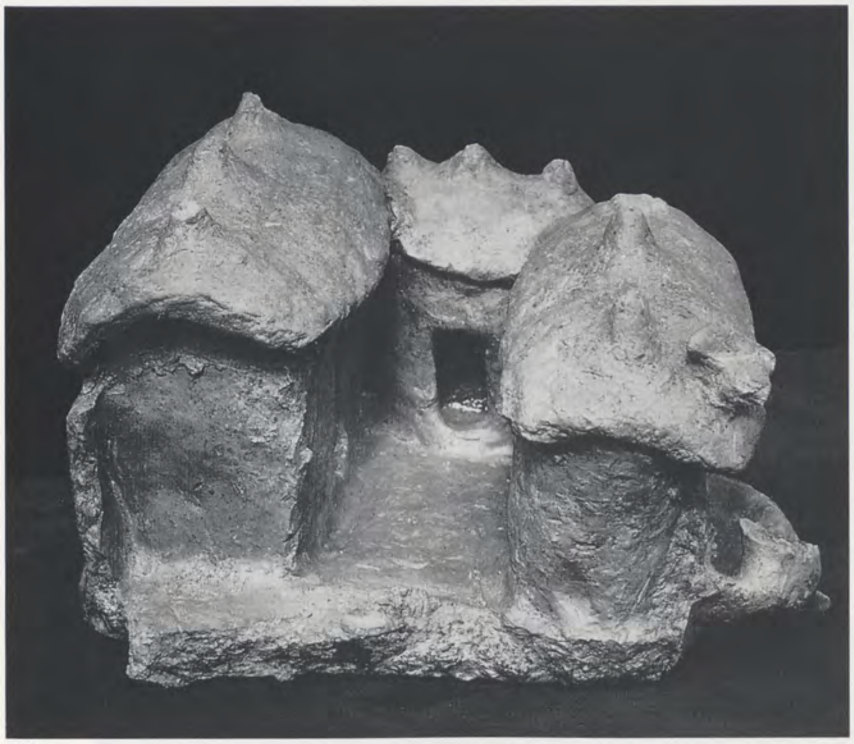

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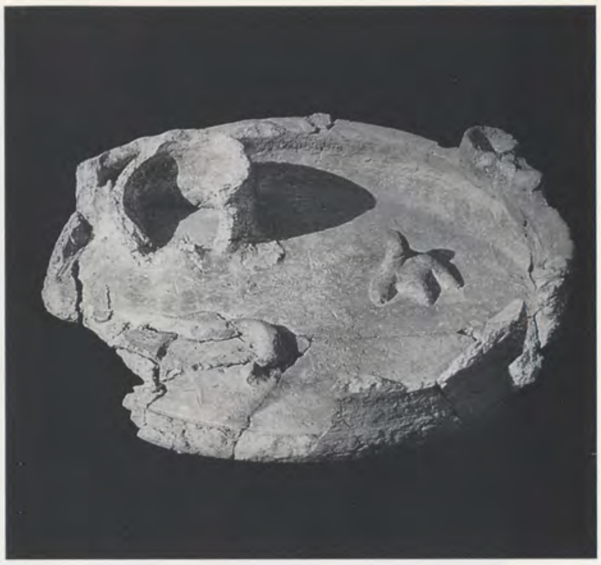

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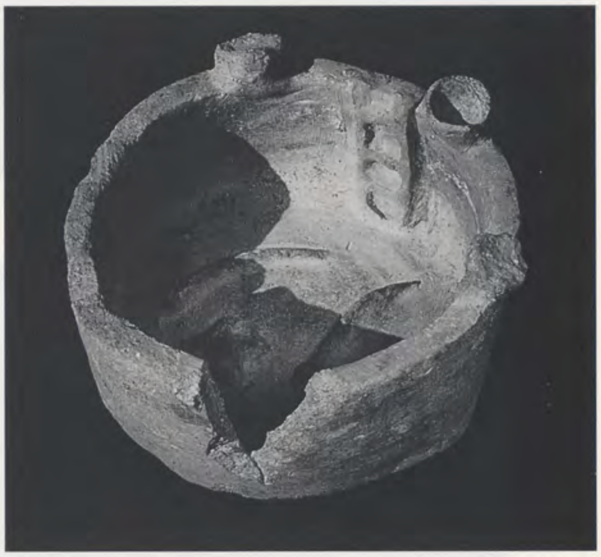

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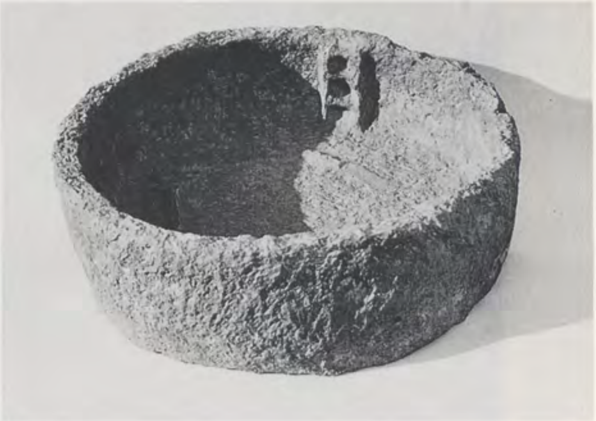

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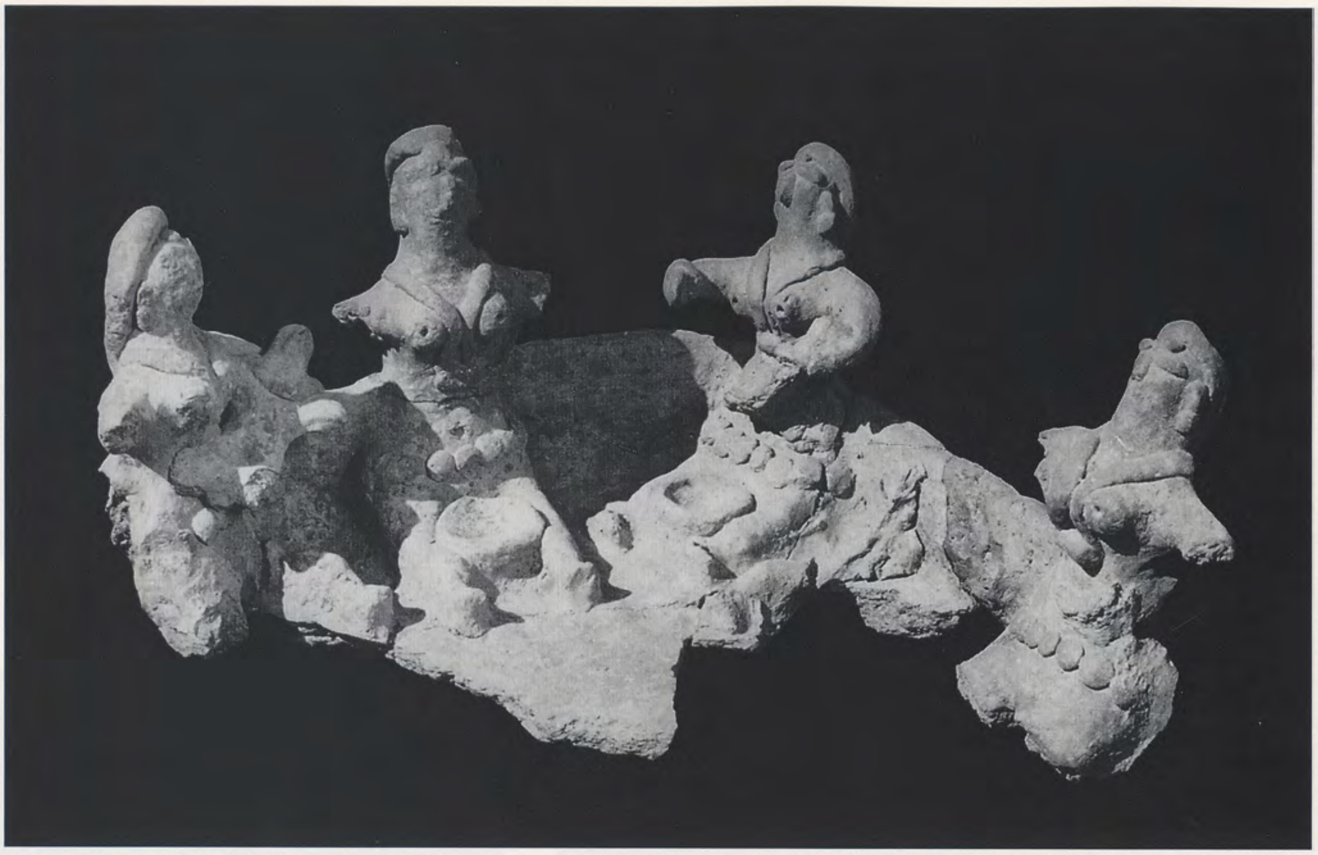
Terracotta Votive Tanks. Period III



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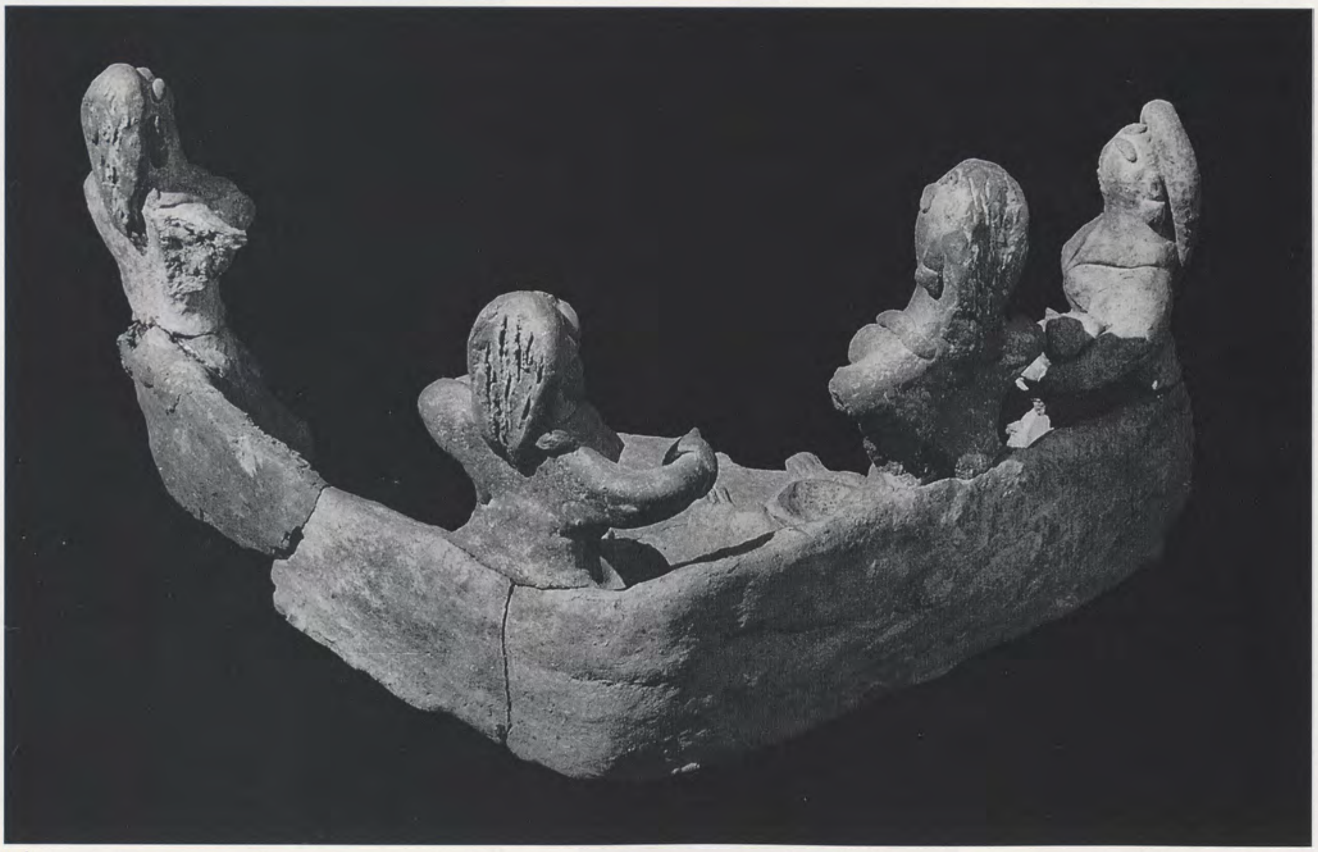

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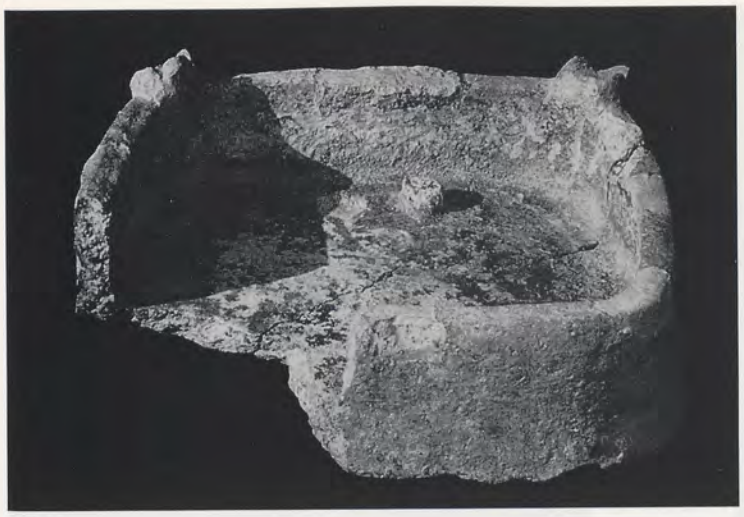
Terracotta Votive Tanks. Period IV



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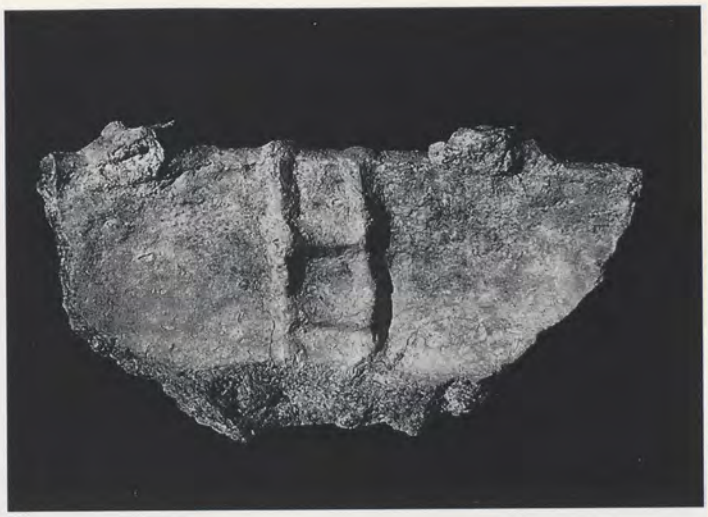

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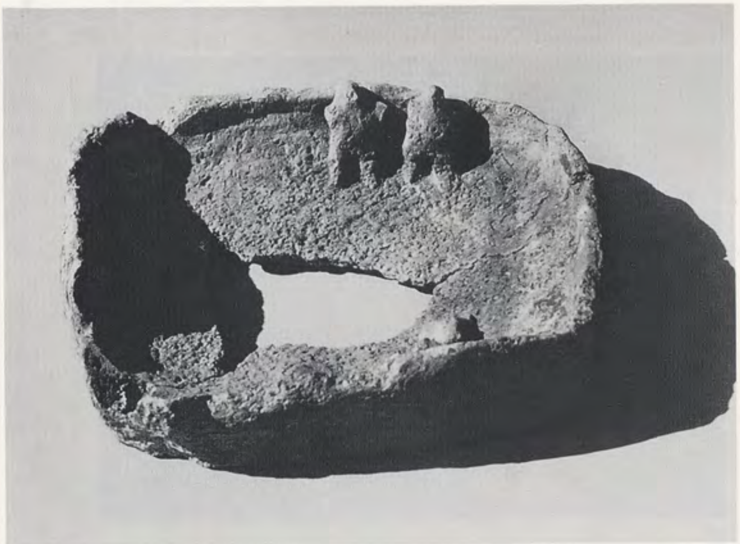

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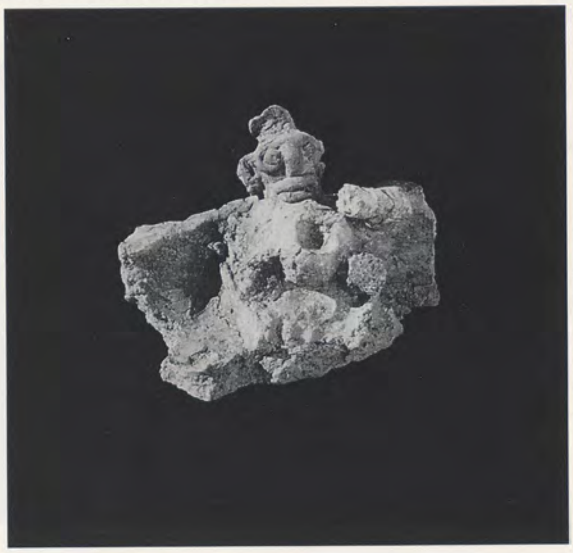

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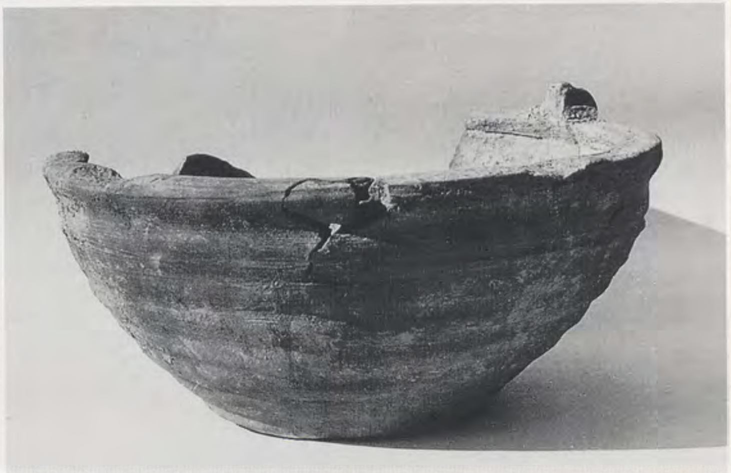

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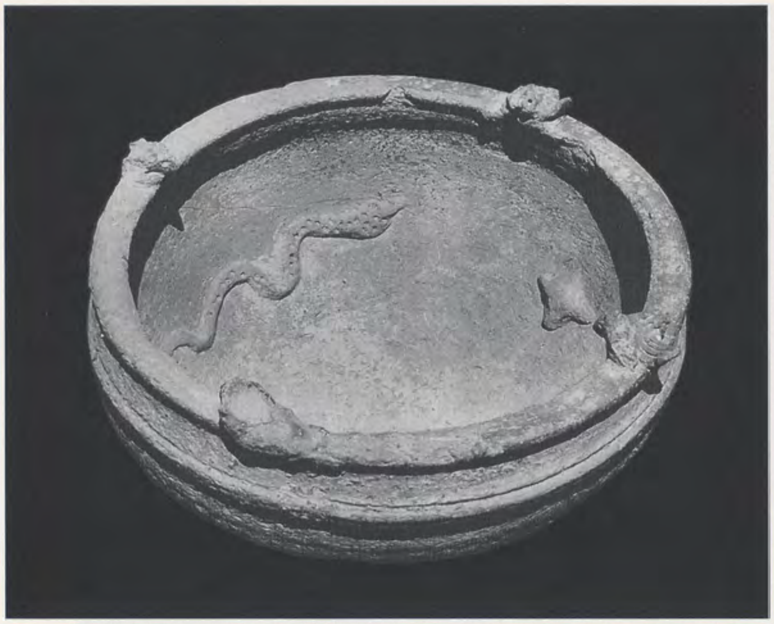
Terracotta Votive Tanks. Period IV–V



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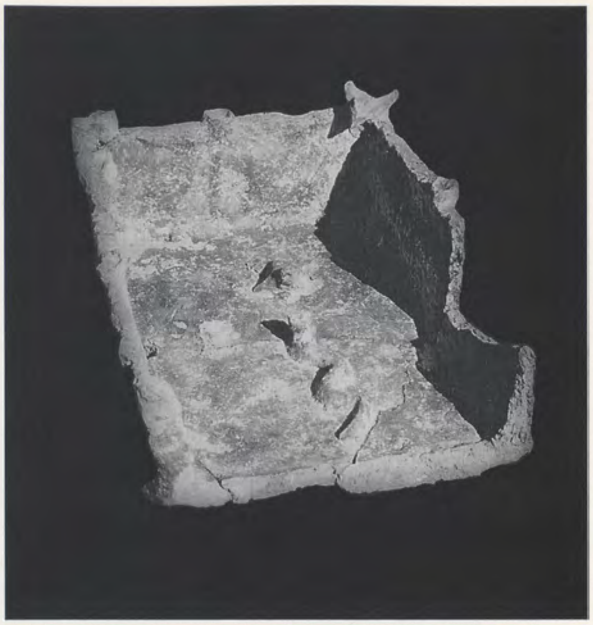

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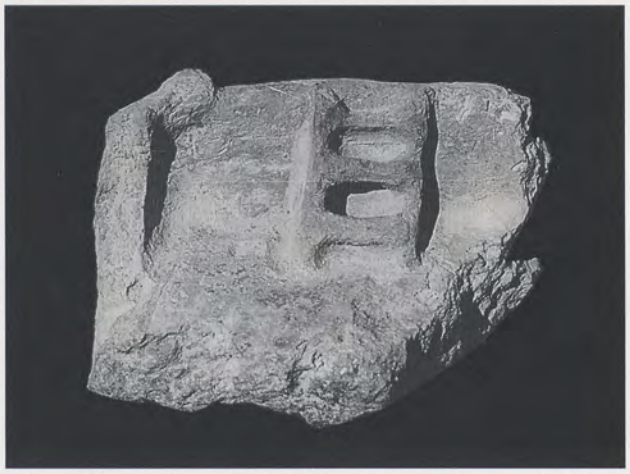

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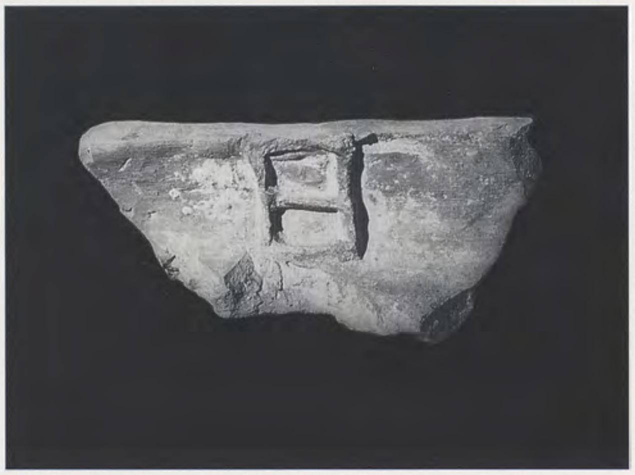

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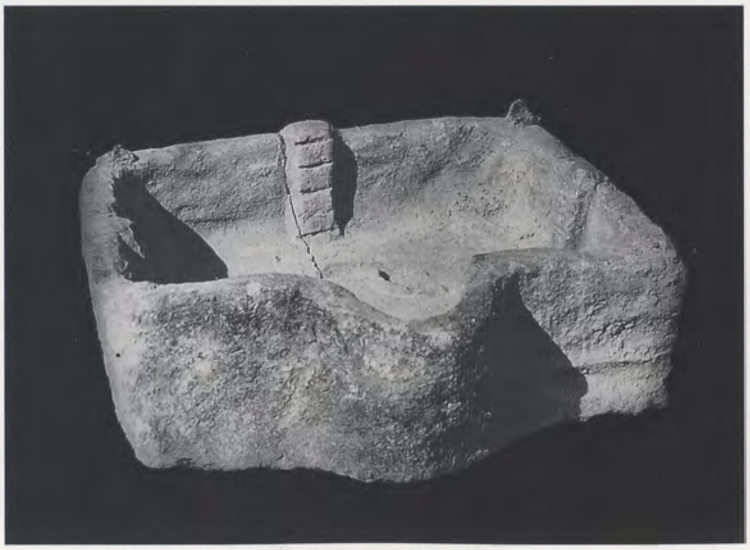

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Terracotta Votive Tanks. Period V–VI

23. Fragmentary votive tank of rectangular shape and with alternating birds and lamp-cups upon the rim. On the ground a snake and a tortoise facing each other.
H. 9.3 cm. L. 29.0 cm. Colour: brown. No. So I 148.
FS.2 IV 15.3/Ca 16.7, H. 23.60 m. Late Kuṣāṇa. L.16

24. Fragment of rectangular votive tank with a ladder applied to the wall.
H. 8.2 cm. B. 10.0 cm. Colour: brown. No. So III A 1028.
FS. 2 IV 13.65/Cb 19.4, H. 22.80 m. Kuṣāṇa. L.17

25. Fragment of a votive tank with ladder.
H. 5.8 cm. L. 16.6 cm. Colour: red. No. So III A 900.
FS. 2 V 0.5–5.5/Cc 0.5–5.5, H. 23.80–23.30 m. L.15/14
Note: Further fragment with ladder and snake registered as find no. So III A 813.

Period VI. Votive tanks from Levels 15 to 12

26. Votive tank and water jug found side by side. Remains of birds or lamps upon rim which is provided with a spout on one side. One ladder each on the other three sides of the enclosure. A snake and frog (?) applied to the bottom.
31.5 × 31.0 × 8.5 cm. Jug: H. 18.5 cm. Colour: brown, blackened by fire. No. So I 89–90.
FS. 2 IV 6.0–6.8/Ca 15.8–16.2, H. 25.20–24.80 m.
Early Medieval. L.12
Note: One fragment of spouted votive tank similar to no. 26 registered as find no. So III A 306.

Toy-carts

The number of fragments of toy-carts found at Sonkh amounts to 41 altogether. They range from the Śuṅga Cultural Phase to the Kuṣāṇas. Many fragments are just crude parts of the platform, or the pole of a cart. Others belonged to more sophisticated and decorated types, esp. those found in the Mitra levels. These earlier carts are, as a rule, provided with not seldom impressive side-planks, either upright or slanting. The later type shows rows of holes in the platform indicating a more simple construction of the planks with the help of rods. There are no fragments of carts from Periods I and II and from a time later than the Kuṣāṇas.

Period III–IV. Toy-carts from Levels 29 to 24

1. Mutilated toy-cart with planks at the sides and in the rear. The rim of the side-planks swings outwards, being decorated with rosette-like discs. Same sort of decoration is applied to the outside of the planks, while the rear one is stamped with a grid-pattern. The axle-hole runs right through the bottom leaving a groove on the ground. On the bottom of the platform a fractured stub is visible, presumably remains of a driver. The pole of the cart is shaped like a bull's head with horns and a perforation. Curiously, two horses were standing upon the coach-box one of which is sufficiently preserved for identification. At the rear of the cart, a hook is visible on the left while a second one is broken off on the right side. As to the wheels, see under WHEELS, no. 8.
9.0. × 16.3 × 9.0 cm. Brick-red. No. So I 203.
FS. 3 I 12.5/Ca 15.15, H. 16.60 m (pit from 29).
Late Śuṅga C.P., L.29

2. Fragment of a toy-cart. Edges being decorated with impressed leaves.
H. 2.0 cm. L. 6.5 cm. Brick-red. No. So III A 3342.
FS. 2 IV 14.0–15.5/Cc 1.5–9.5, H. 17.20–17.05 m.
Early Mitra. L.28

3. Fragment of a toy-cart showing curved pole ending in a hook. A perforation for the yoking runs through the pole, but those for the wheels are pierced through pending semicircular axle-holders attached to the middle of the cart.
L. 13.1 cm. B. 6.4 cm. Brick-red. No. So III A 2219.
FS. 3 I 6.0/Ca 16.7, H. 17.90 m. Mitra. L.27
Note: Further fragments with pending axle devices from L.27 registered as nos. So III A 2167; 2217.

4. Thill of a toy-cart.
L. 6.7 cm. B. 6.1 cm. Brown. No. So III A 2166.
FS. 3 I 5.1/Ca 16.4, H. 18.05 m. Mitra. L.27

5. Tongue of a toy-cart. Vertical perforation for yoking animals to the cart. Side-planks broken off.
L. 5.0 cm. B. 2.9 cm. Brick-red. No. So III 3003.
FS. 2 V 2.8–4.5/Ca 9.5–15.5, H. 18.64–18.40 m.
Mitra. L.26
Note: One further specimen with perforated tongue registered as find no. So III A 3649.

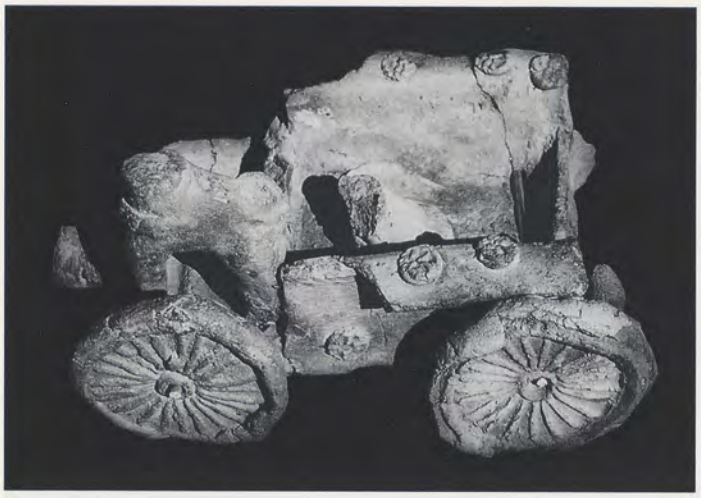
6. Fragment of a toy-cart. Bottom decorated with stamped grid, slanting side-plank with vertical grooves. Outer sides plain. Traces of applied axle-holder on one side of the base.
L. 8.5 cm. B. 6.0 cm. Brick-red. No. So III A 3378.
FS. 2 V 10.5–16.2/Cb 13.4–16.0, H. 18.75–18.55 m.
Mitra. L.25

7. Side-plank of a toy-cart decorated with moulded rosettes.
L. 8.4 cm. Colour: brick-red. No. So III A 2694.
FS. 2 V 2.0–4.0/Ca 12.3–15.0, H. 19.75–19.50 m.
Kṣatrapa. L.24
Note: One further fragment with applied rosettes: So III A 2488.

Period V. Toy-carts from Levels 22 to 15

8. Platform of a toy-cart. Perforated for the axle in the middle of the length. On the long sides of the bottom a line of presumably eleven holes each for fastening rods.
8.1 × 5.7 cm. Colour: brick-red. No. So III A 1503.
FS. 2 IV 0.5 -6.0/Cb 16.0–19.5, H. 22.02–21.57 m.
Kuṣāṇa. L.20/19.
Note: One further fragment of same type registered as So III A 751

9. Fragment of the platform of a toy-cart with originally six vertical holes for the rods. At the small side a shallow excavation and a large hole for fastening a cart-pole is visible.
H. 1.6 cm. L. 3.2 cm. Brick-red. No. So III A 915.
FS. 15.0–18.0/Cb 4.0–5.0, H. 22.70–22.40 m.
Kuṣāṇa. L.18
Note: Further fragments from Period V with six rod-holes in the platform registered as finds nos. So III A 669; 949; 1289; 2092.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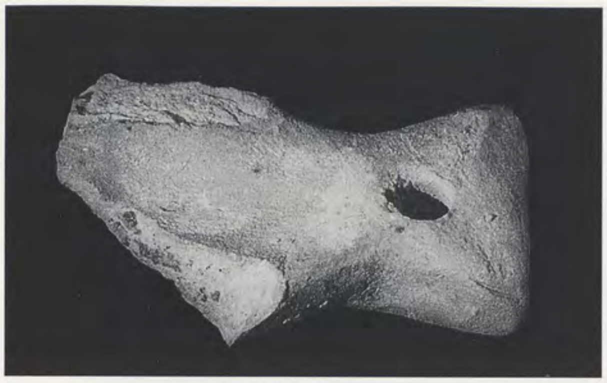
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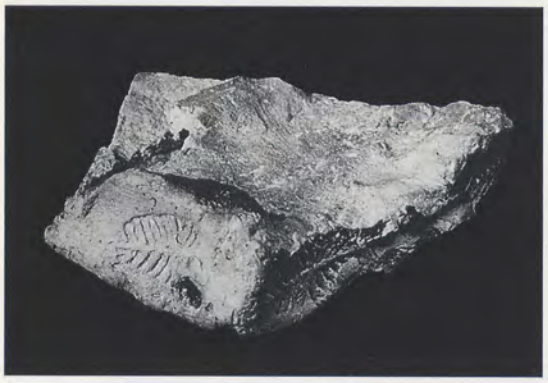
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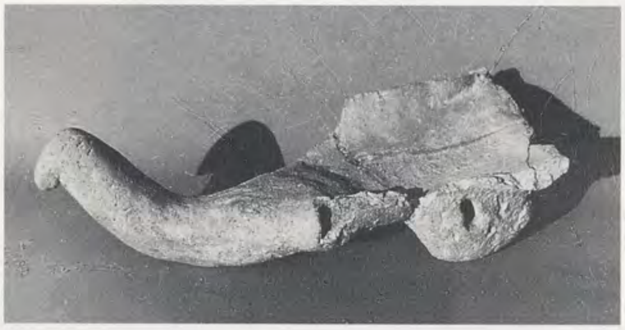
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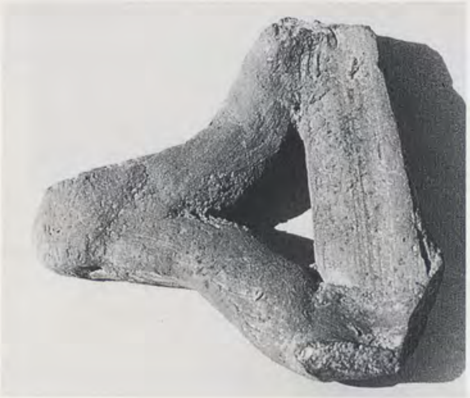
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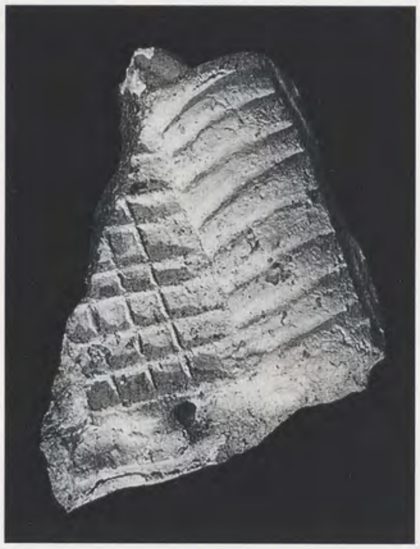
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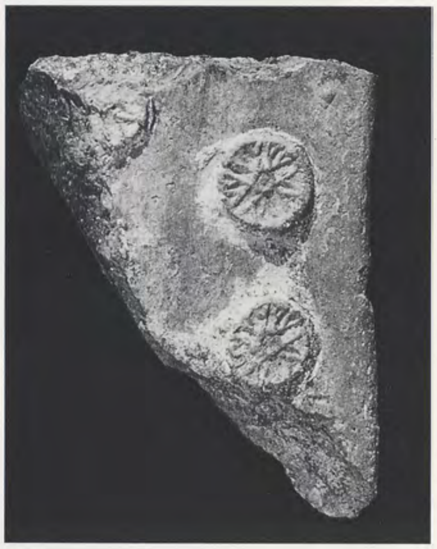
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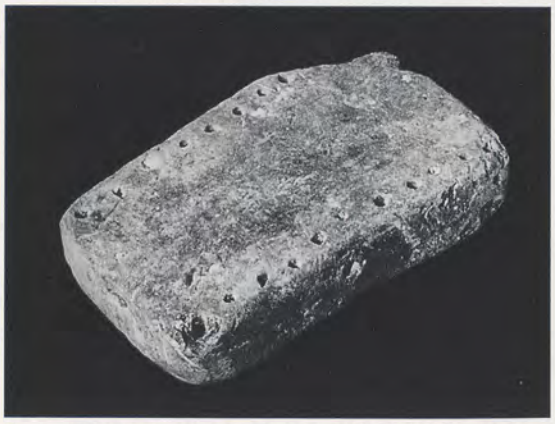
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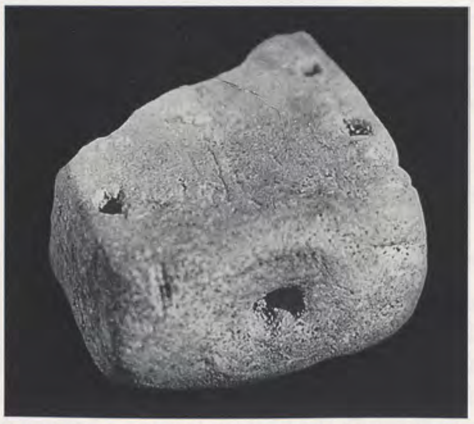
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Terracotta Toy-carts. Period III–IV (1–7), Period V (8–9)

Wheels

Of all the 291 specimens of terracotta wheels recovered at Sonkh, 247 of them are plain and 44 decorated mostly with spokes. The diameter varies between 2.3 and 9.2 cms, indicating that the wheels were transporting objects of different size, like toy animals and carts. The finds hail from levels 34 to 14, i.e. from period II to VI. Several plain types appear through all these periods though with some variations in details, as e.g. the structure of the axle-hubs. Lenticular wheels (no. 16) have been found only from level 23 onwards, and types with strongly protruding axles (nos. 19, 21, 23–25) came to light exclusively in the Kuṣāṇa levels. The decoration with spokes, as a rule moulded, begins with the Śuṅga Cultural Phase and is quite in fashion in the Mitra time of Mathura. The number of spokes varies in between 9 and 34 but obviously without any deeper meaning. From a later period, very few specimens only of decorated wheels are known, their decorations being clumsily incised (nos. 24–26).

Period II–III. Wheels from Levels 34 to 24

1. Double-convex wheel. Crudely made.
Diam. 4.5 cm. Colour: grey. No. So III A 1961.
FS. 3 I 10.8/Ca 16.3, H. 14.50 m. Maurya. L.34

2. Wheel with pricked holes around axle-perforation.
Diam. 3.7 cm. Colour: brown. No. So III A 3638.
FS. 2 IV 6.5–10.5/Cc 3.8–5.5, H. 15.85–15.65 m.
Maurya. L.33/32

3. Wheel. Both sides plane with thrown up edges around perforation.
Diam. 7.1 cm. Colour: brown. No. So III A 3400.
FS. 2 IV 2.0–4.2/Cc 8.1–9.5, H. 15.80–15.70 m.
Maurya. L.33/32
Note: 18 further specimens of this type from period II/III registered under So III A. Diameter between 3.3 and 7.0 cm.

4. Wheel. Both sides plane surface.
Diam. 7.2 cm. Colour: brown. No. So III A 3466.
FS. 2 IV 17.-18.15/Cc 0.5–9.5, H. 16.30–15.15 m.
Late Maurya. L.32/31
Note: 35 further wheels of this type from period II/III registered under So III A. Diameter between 3.0 and 7.2 cm.

5. Wheel with prominent hub on the obverse. Reverse plain.
Diam. 2.9 cm. Colour: grey. No. So III A 3695.
FS. 2 IV 11.2–14.8/Cc 8.5–9.5, H. 16.00–15.80 m.
Maurya. L.32
Note: 5 further wheels of this type from Period II/III registered under So III A. Diameter between 4.0 and 6.1 cm.

6. Wheel with 9 moulded spokes around a prominent hub on the obverse. Reverse plain and uneven.
Diam. 8.2 cm. Colour: brown. No. So III A 3309.
FS. 2 IV 12.7–14.0/Cc 0.5–9.5, H. 17.20–17.05 m.
Early Mitra. L.28

7. Wheel with 12 moulded spokes around a hub on the obverse. Reverse plain.
Diam. 8.4 cm. Colour: red. No. So III A 1587.
FS. 3 I 6.5–8.9/Ca 14.85–17.6, H. 18.68–17.80 m.
Mitra. L.27/26
Note: 6 further wheels with 12 and one with 18 spokes from Period II/III registered under So III A. Diameter between 7.0 and 8.3 cm.

8. Wheel with 22 moulded spokes around thrown up edge of perforation hole.
Diam. 6.5 cm. Colour: brown. No. So III A 2355.
FS. 3 I 8.2/Ca 14.0, H. 17.80 m. Early Mitra. L.28
Note: 2 further wheels with 22 spokes registered under So III A. Diameter 6.2–6.5 cm.

9. Moulded wheel with prominent central hub from which 21 spokes radiate. At the ends of the spokes an elevated dot each. Reverse plane.
Diam. 7.1 cm. Colour: brown. No. So III A 2593.
FS. 2 V 11.7/Ca 3.5, H. 18.80 m. Mitra. L.26
Note: 5 further wheels of this type with varying number of spokes (13, 17, 20, 24) from Period III registered under So III A. Diameter between 4.7 and 8.7 cm.

10. Moulded wheel with 32 spokes around central hub. Dot between the ends of two spokes each.
Diam. 7.3 cm. Colour: red. No. So III A 1589.
FS. 3 I 6.5–8.9/Ca 14.85–17.6, H. 18.68–17.80 m.
Mitra. L.27/26
Note: 2 further specimens with 32 spokes under So III A.

11. Moulded wheel with three-stepped central hub encircled by a lower wreath and an elevated rim with short spokes as well as a plain outer ring with upturned edge. Reverse plane.
Diam. 6.65 cm. Colour: red. No. So III A 1474.
FS. 3 II 0.0–1.75/Ca 16.5–19.5, H. 18.24–17.75 m.
Mitra. L.28/27

12. Wheel with two-stepped central hub radiating 34 short spokes towards upturned edge. Reverse plane.
Diam. 7.2 cm. Colour: red slip. No. So III A 1586.
FS. 3 I 6.5–8.9/Ca 14.85–17.6, H. 18.68–17.80 m.
Mitra. L.27/26
Note: One further specimen of same 34-spokes' type registered as So III A 1585.

Period IV–VI. Wheels from Levels 24 to 15

13. Plane wheel. Crudely modelled.
Diam. 4.2 cm. Colour: grey. No. So III A 2649.
FS. 2 V 4.0–5.0/Ca 19.0–19.5, H. 20.30–20.15 m.
Kṣatrapa. L.23
Note: 7 further wheels of this type from Period IV registered under So III A. Diameter between 3.2 and 5.3 cm.

14. Plain wheel with small hub.
Diam. 4.7 cm. Colour: brown. No. So III A 3223.
FS. 2 V 13.5–15.9/Cb 11.0–13.75, H. 18.95–18.70 m.
Early Kṣatrapa. L.24
Note: 10 further wheels of same type registered under So III A. Diameter between 3.3 and 6.0 cm.

15. Plano-convex wheel with slightly elevated centre.
Diam. 5.7 cm. Colour: brown. No. So III A 3114.
FS. 2 V 0.5–2.3/Cb 9.5–10.5, H. 19.35–19.05 m.
Kṣatrapa. L.24/23
Note: 11 further wheels of same type registered under So III A. Diameter between 2.7 and 6.0 cm.

16. Lenticular wheel with flat hub.
Diam. 3.8 cm. Colour: brown. No. So III A 2021.
FS. 2 V 16.3–20.0/Ca 17.3–19.5, H. 20.55–20.25 m.
Kṣatrapa. L.23

17. Wheel. Both sides plane. Perhaps used as spindle-whorl.
Diam. 2.1 cm. Colour: grey. No. So III A 808.
FS. 2 V 1.5–4.0/Ca 2.5–4.6, H. 22.90–22.60 m.
Kuṣāṇa. L.18
Note: Further 18 wheels of same type from Period V registered under So III A. Diameter between 3.5 and 9.4 cm.

18. Plano-convex wheel with small hub.
Diam. 6.0 cm. Colour: brown. No. So III A 2993.
FS. 2 V 5.0–9.0/Cb 18.0–19.5, H. 20.60–20.40 m.
Kuṣāṇa. L.22/21
Note: 5 further wheels of same type registered under So III A. Diameter between 3.4 and 6.6 cm.

19. Double-convex wheel with prominent hub.
Diam. 2.9 cm. Colour: brown. No. So III A 867.
FS. 2 V 3.0–9.5/Ca 19.3–19.5, H. 21.90–21.60 m.
Kuṣāṇa. L.20
Note: 47 further wheels of same type from Period V registered under So III A. Diameter between 2.5 and 8.8 cm.

20. Double-convex wheel with on both sides protruding hubs.
Diam. 4.2 cm. Colour: grey. No. So III A 2077.
FS. 2 IV 9.5–10.5/Ca 1.0–4.75, H. 22.05–21.80 m.
Kuṣāṇa. L.20
Note: 8 further wheels of same type registered under So III A. Diameter between 3.3 and 4.8 cm.

21. Double-convex wheel with strongly protruding hubs on both sides.
Diam. 7.6 cm. Colour: brown. No. So III A 1329.
FS. 2 IV 3.0–6.0/Ca 3.0–6.3, H. 22.50–22.25 m.
Kuṣāṇa. L.19
Note: 2 further wheels with double hubs registered under So III A. Diameter 3.5 and 3.9 cm.

22. Lenticular wheel.
Diam. 4.5 cm. Colour: brown. No. So III A 2457.
FS. 2 V 9.5–10.5/Ca 17.0–19.5, H. 20.90–20.60 m.
Kuṣāṇa. L.22
Note: 21 further wheels of lenticular type from Period V registered under So III A. Diameter between 3.3 and 6.2 cm.

23. Big plain wheel with broad hubs.
Diam. 8.8 cm. Colour: brown. No. So III A 2869.
FS. 2 IV 10.5–11.35/Ca 8.8–9.5, H. 22.30–21.80 m.
Kuṣāṇa. L.20/19

24. Fragment of big wheel with on both sides protruding hubs. Arbitrary impression of semicircles along the edge.
Diam. 8.0 cm. Colour: grey-brown. No. So III A 2704.
FS. 2 IV 11.5–19.5/Cb 2.0–3.5, H. 21.88–21.55 m.
Kuṣāṇa. L.21/20

25. Double-convex wheel with protruding hubs. Clumsily incised spokes at both sides.
Diam. 4.2 cm. Colour: brown. No. So III A 1303.
FS. 2 V 12.2/Cb 8.2, H. 21.40 m. Kuṣāṇa. L.20

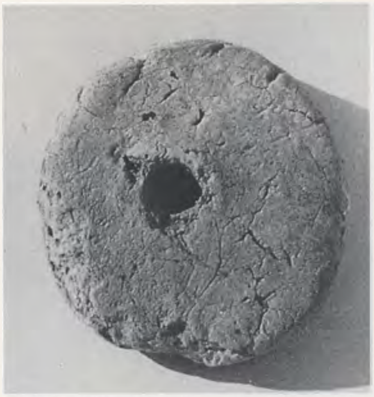
26. Lenticular wheel with protruding hubs. Incised strokes on obverse.
Diam. 3.4 cm. Colour: grey. No. So III A 1274.
FS. 2 IV 7.5–9.5/Ca 0.5–2.5, H. 22.60–22.10 m.
Kuṣāṇa. L.19
Note: 2 further fragments of same type of wheels registered under So III A.

27. Plano-convex wheel. Central hub encircled by punched holes.
Diam. 4.0 cm. Colour: grey. No. So III A 1718.
FS. 2 V 6.0–8.0/Cb 0.5–9.5, H. 21.53–21.10 m.
Kuṣāṇa. L.20

28. Plane wheel. One side rough.
Diam. 4.3 cm. Colour: red. No. So III A 511.
FS. 2 V 16.5–18.3/Ca 16.2–19.5, H. 23.35–23.00 m.
Kuṣāṇa. L.16
Note: 4 further wheels of same type registered under So III A.

29. Lenticular wheel.
Diam. 4.5 cm. Colour: brown. No. So III A 766.
FS. 2 IV 19.5–2 V 0.5/Ca 10.5–17.5, H. 24.50–24.15 m.
Gupta. L.14

30. Wheel with big hubs.
Diam. 3.5 cm. Colour: red. No. So III A 662.
FS. 2 IV 2.5–4.5/Cb 2.0–9.5, H. 24.25–23.95 m.
Gupta. L.14
Note: One further wheel of same type from L.14 under So III A 837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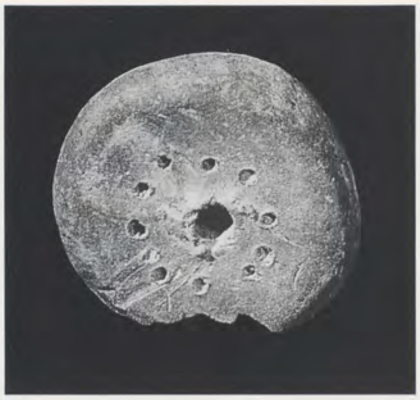
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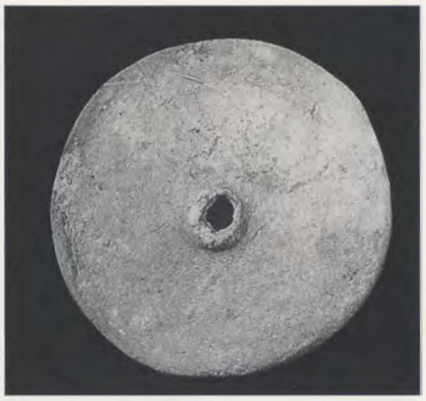
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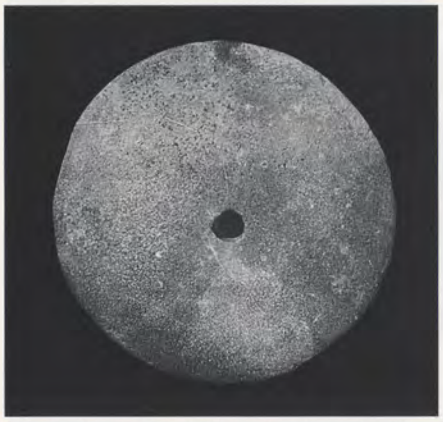
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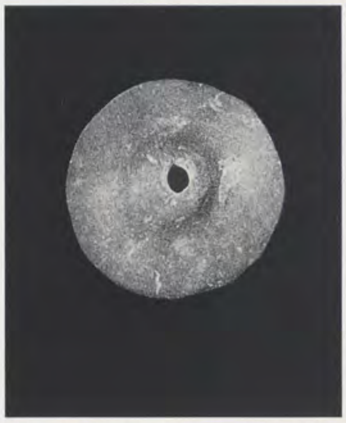
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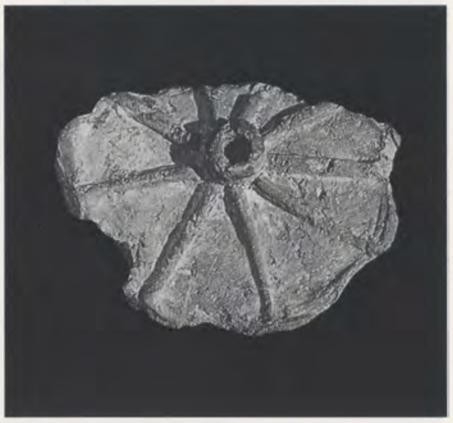
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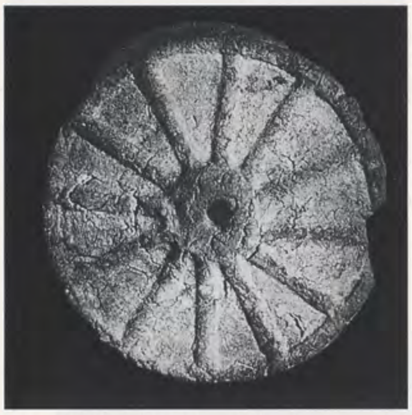
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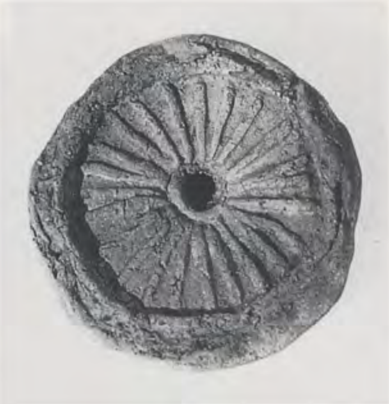
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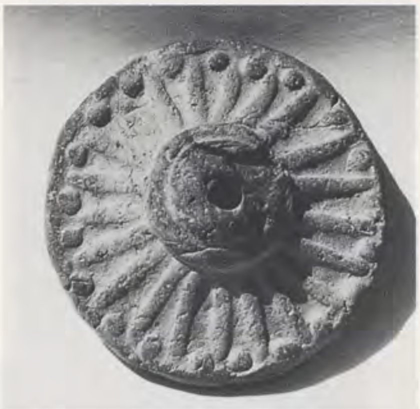
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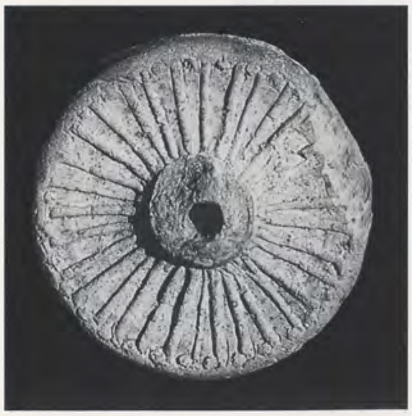
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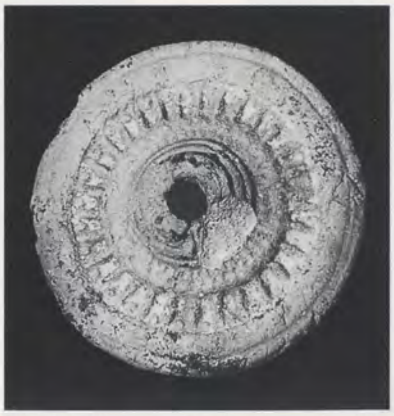
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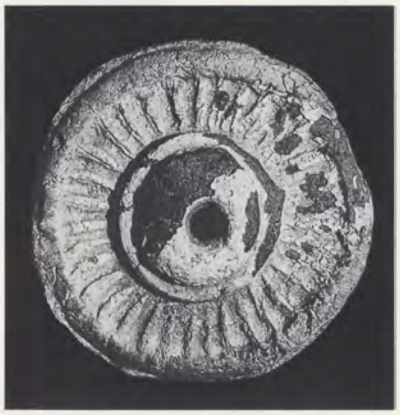
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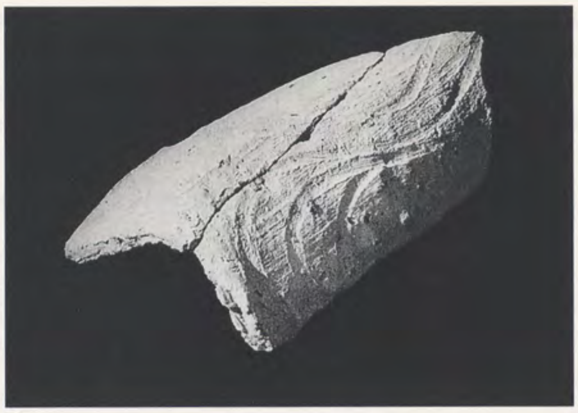
Terracotta Wheels. Period II–III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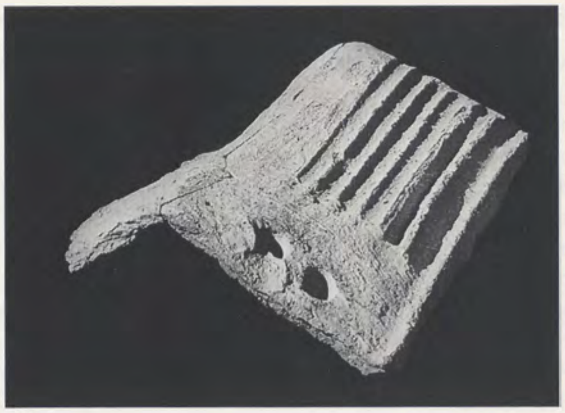
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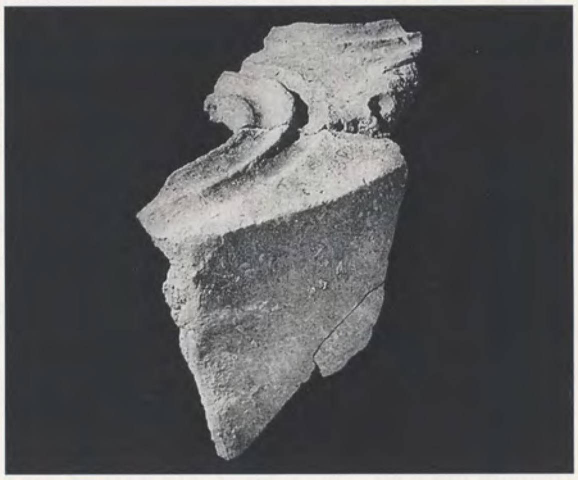
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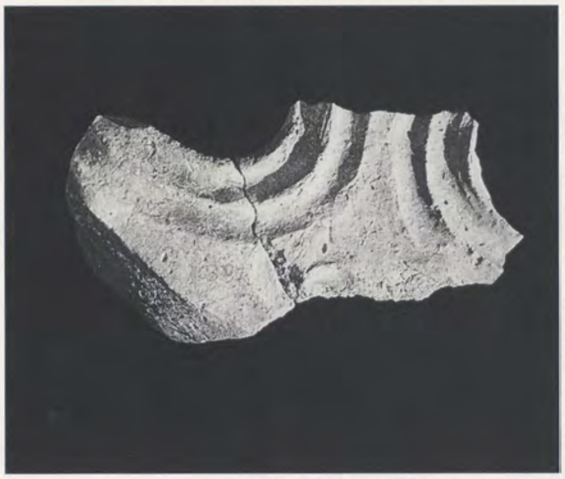
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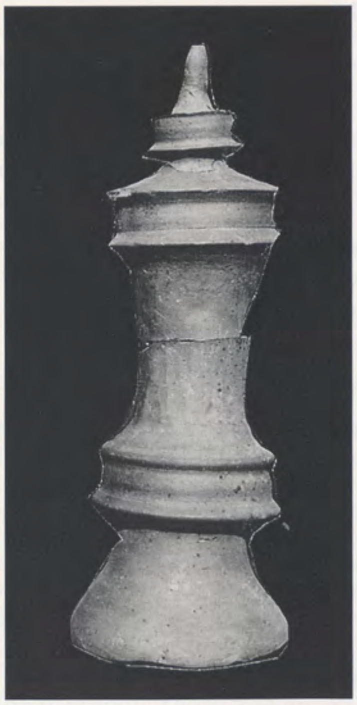
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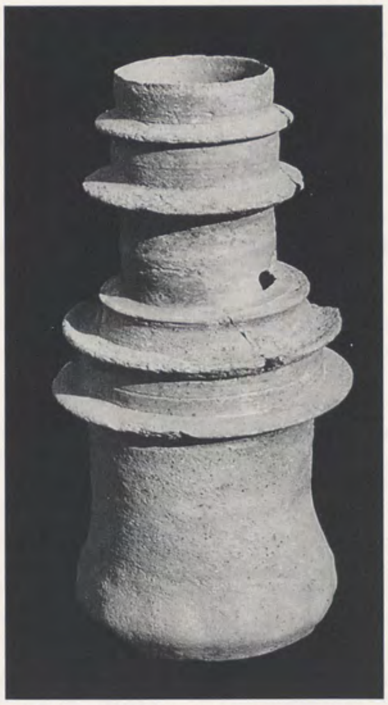
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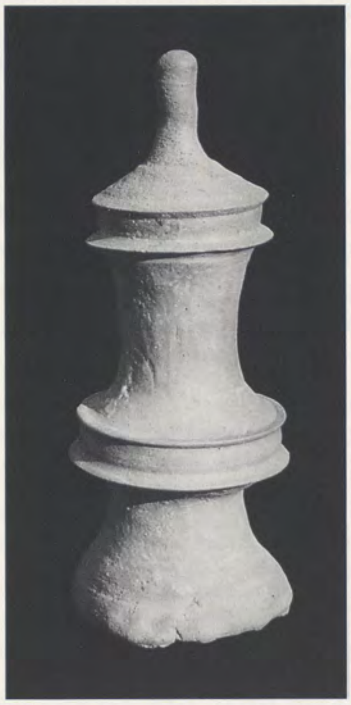
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Some Structural Objects, Period III

N. DECORATED POTTERY

During the excavation all fragments of pottery and loose sherds with decorative designs have been checked and its types registered. Altogether 1294 varying types of patterns were collected. The whole material has been dealt with in a thesis titled "Die Besonderen Scherben von Sonkh", submitted by Dr. Annette Achilles-Brettschneider (Free University Berlin 1980). For the purpose at hand a selection of 186 specimens represents the main types of decorative pottery patterns found in Sonkh. The material is going to be presented Period by Period, thus documenting appearance and disappearance of special methods of decorating potteries, and of the patterns changing so significantly during the times. The different pieces will, within the Periods, be grouped according to their technique in the order *painted, incised, paddle-marked, applied, stamped or moulded.* More complete or intact vessels with decoration are treated in the chapter POTTERY.

Period I. Fragments and Sherds from the PGW-Levels 40 to 37

1. Bowl-fragment of grey ware painted in black on the inner side with rows of dots and traces of strokes crossing the edge. 5.4 × 3.3 cm. So III F 814.

2. Sherd of grey ware painted in black with rows of short strokes on one side. 6.3 × 5.3 cm. So III F 816.

3. Base-fragment of a grey ware bowl painted on the inner side with four sets of strokes meeting at a free square. Black colour getting reddish at the outer ends. Outside reddish. 11.3 × 8.5 cm. So III F 952.

4. Rim-fragment of grey ware painted with a grey and orange horizontal band. 5.7 × 3.5 cm. So III F 821.

5. Rim-fragment of grey ware bowl painted on the inner side with one broad and two narrow vertical strokes, and a border-line along the edge. 3.3 × 3.4 cm. So III F 818.

6. Bowl-fragment of grey ware showing painted rim and set of 10 vertical brush-strokes on the outside. 5.5 × 5.3 cm. So III F 815.

7. Fragment of small bowl of grey ware painted with criss-cross design. 6.3 × 4.7 cm. So III F 827.

8. Bowl-fragment of grey ware painted with groups of curved strokes at the bottom and vertical strokes on the inner side. 10.4 × 7.3 cm. So III F 825.

9. Rim-fragment of grey ware bowl painted with flame-like curved strokes running downwards from rim. 4.1 × 2.6 cm. So III F 823.

10. Sherd of grey ware bowl painted on the inner side with a flower-like design formed by intersecting curved lines. 4.0 × 3.3 cm. So III F 843.

11. Sherd of grey ware bowl painted on the inner side with a set of ash-brown wavy lines of varying thickness. Outside ochre-coloured. 3.8 × 2.6 cm. So III F 960.

12. Sherd of grey ware bowl painted on one side with oblique rows of dots between two parallel lines. 8.3 × 1.5 cm So III F 998.

13. Rim-fragment of grey ware vase painted on the inner side with thick vertical strokes and carelessly placed dots in between. 4.6 × 3.2 cm. So III F 1241.

14. Sherd of grey ware painted with wavy lines and a double row of dots. 5.0 × 4.3 cm. So III F 847.

15. Sherd of grey ware painted with a set of concentric semicircles and parallel rows of dots. 5.8 × 3.8 cm. So III F 826.

16. Base-fragment of grey ware bowl painted on the inner side with strokes and dots and with incomplete concentric circles around bottom centre. 9.9 × 3.9 cm. So III F 836.

17. Base-fragment of grey ware painted with concentric circles and dot in centre. 3.6 × 3.0 cm. So III F 833.

18. Sherd of grey ware bowl painted on the outside with parallel strokes and concentric circles. 7.5 × 5.7 cm. So III F 835.

19. Sherd of grey ware painted with dots in a hook. 3.0 × 2.6 cm. So III F 857.

20. Rim-fragment of grey ware painted with a rim-band and hooked strokes forming a star. 3.3 × 3.1 cm. So III F 1288.

21. Small sherd of grey ware painted with a design in shape of a star. 2.0 × 1.6 cm. So III F 1242.

22. Sherd of grey ware painted with a design formed by hooks emerging from a common centre. 3.6 × 2.2 cm. So III F 1246.

23. Sherd of grey ware painted with a "ladder" and hooks. 7.1 × 6.8 cm. So III F 851.

24. Base-fragment of grey ware painted with two parallel signs shaped like a closed S. 9.3 × 8.9 cm. So III F 1290.

25. Sherd of grey ware painted with a petal-shaped design filled with two rows of short strokes. 5.6 × 4.3 cm. So III F 854.

26. Sherd of grey ware painted with curved strokes, dots, and a corkscrew design. 4.8 × 4.5 cm. So III F 841.

Associated Red Ware

27. Sherd of red ware showing triangles with pecked notches and an incised horizontal herring-bone band as upper border. 11.7 × 10.1 cm. So III F 595.

28. Fragment of red ware vessel incised with a double wavy line along shoulder. 11.6 × 6.3 cm. So III F 994.

29. Fragment of red ware vessel decorated with a horizontal band of an incised design shaped like opened scissor-blades. 6.6 × 5.9 cm. So III F 1280.

30. Shoulder-fragment of red ware vessel decorated with a horizontal band of rows of oblique pecked notches. 11.4 × 5.1 cm. So III F 1279.

31. Rim-fragment of red ware vessel decorated with a horizontal band of oblique short strokes. 12.8 × 6.2 cm. So III F 786.

32. Sherd of red ware decorated with a rough paddle-marked check design. 13.4 × 10.2 cm. So III F 599.

33. Sherd of red ware decorated with a paddle-marked check design. 6.3 × 4.7 cm. So III F 658.

34. Shoulder-fragment of red ware vessel showing a horizontal appliqué rib having oblique incisions. 10.9 × 8.1 cm. So III F 666.

Period II. Fragments and Sherds from Levels 36 to 30

35. Shoulder-fragment of red ware vessel crudely incised with a check design. 5.5 × 4.7 cm. So III F 977. Maurya. L.33/32

36. Rim-fragment of a red ware bowl with incision of an elephant(?) on the inner side. 6.3 × 4.2 cm. So III F 1270. Maurya. L.31/30

37. Base-fragment of NBP ware bowl with stamped concentric circles. 4.1 × 2.9 cm. So III F 1238. Maurya. L.36/35.

38. Base-fragment of grey ware with stamped design of two concentric circles having elevated dots in the outer and a single dot in the central orb. 3.0 × 1.9 cm. So III F 993. Maurya. L.34/33.

Period III. Fragments and Sherds from Levels 28 to 25

39. Shoulder-fragment of red ware vessel showing incised birds and lotus rosettes above geometrical border consisting of incised and punctured grooves. 7.1 × 7.3 cm. So III F 1282. Mitra. L.26/25

40. Shoulder-and-rim-fragment with triangular notches within incised triangles. 10.0 × 4.8 cm. So III F 1219. Mitra. L.27/26

41. Base-fragment of red ware vessel decorated with short notches within incised triangle. 7.2 × 5.5 cm. So III F 619. Mitra. L.25

42. Sherd of red ware decorated with paddle-marked rhomboid design. 7.3 × 7.1 cm. So III F 1284. Early Mitra. L.28

43. Sherd of red ware vessel with paddled parallel grooves. 11.8 × 8.5 cm. So III F 1206. Mitra. L.26

44. Sherd of red ware vessel strongly paddled with sets of parallel grooves. 13.9 × 5.6 cm. So III F 997. Mitra. L.26

45. Sherd of red ware vessel paddled with sets of deep parallel grooves. 8.8 × 8.3 cm. So III F 604. Mitra. L.25

46. Shoulder-fragment of a red ware vessel showing one appliqué and punctured taurine symbol. 4.6 × 4.0 cm. So III F 1285. Early Mitra. L.28(?)

47. Sherd of red ware with appliqué curved svastika on disc-like base. 6.3 × 4.1 cm. So III F 615. Mitra. L.26

48. Sherd of red ware with appliqué curved svastika. 11.4 × 9.9 cm. So III F 988. Mitra. L.26

49. Shoulder-fragment of red ware vessel decorated with an appliqué horizontal rib looking like a twisted cord, and an appliqué nandyāvarta symbol. 10.9 × 10.3 cm. So III F 1143. Mitra. L.26

50. Sherd of red ware vessel decorated with horizontally grooved lines, and a fourfold nandyāvarta impression. 3.8 × 3.2 cm. So III F 1229. Mitra. L.26

51. Sherd of red ware with appliqué nandyāvarta symbol. 9.8 × 6.6 cm. So III F 756. Mitra. Ditch.

52. Shoulder-fragment of red ware vessel showing an appliqué horizontal rib with finger-impressions. 12.7 × 6.6 cm. So III F 877. Mitra. L.27

53. Fragment of a red ware vessel showing two appliqué parallel horizontal ribs with a design of vertical cloth-impressed notches. 8.8 × 7.7 cm. So III F 1220. Mitra. L.27/26

54. Shoulder-fragment of red ware vessel with appliqué horizontal rib looking like a twisted cord. 11.4 × 3.4 cm. So III F 1167. Mitra. L.26

55. Shoulder-fragment of red ware vessel with two appliqué horizontal ribs, one looking like a twisted cord, the other showing thumb-impressed design. 12.7 × 9.2 cm. So III F 1259. Mitra. L.25

Period IV. Fragments and Sherds from Levels 24 to 23

56. Sherd of red ware with a band of zigzag incisions bordered by grooved lines. 4.3 × 5.2 cm. So III F 966. Kṣatrapa. L.24/23

57. Sherd of red ware paddled with sets of parallel grooves. 10.1 × 7.5 cm. So III F 1054. Kṣatrapa. L.24

58. Sherd of red ware with incised and impressed grooves. 14.0 × 4.9 cm. So III F 939. Kṣatrapa. L.24/23

59. Fragment of red ware vessel showing appliqué ribs with notches, and circles with elevated dots. 8.1 × 6.0 cm. So III F 537. Kṣatrapa. L.24

60. Sherd of red ware with moulded double-lined svastika on appliqué disc of clay. 8.1 × 6.0 cm. So III F 887. Kṣatrapa. L.24

61. Sherd of red ware vessel with appliqué angular svastika. 10.4 × 6.2 cm. So III F 1261. Kṣatrapa. L.24/23

62. Sherd of red ware with appliqué lotus rosette. 6.3 × 6.3 cm. So III F 992. Early Kṣatrapa. L.(25)/24

63. Sherd of red ware with impressed nandyāvarta. 4.9 × 4.2 cm. So III F 1266. Kṣatrapa. L.24

64. Shoulder-fragment of a jar in red ware decorated with grooved horizontal lines and stamped semicircles. 10.2 × 5.9 cm. So III F 1189. Kṣatrapa. L.24

65. Shoulder-fragment of a jar in red ware showing two parallel bands of 3-shaped design. 7.6 × 7.8 cm. So III F 1150. Kṣatrapa.L.24

66. Shoulder-fragment of a jar in red ware decorated with horizontal grooves and a band of stamped design shaped like turned S. 5.9 × 4.5 cm. So III F 1217. Kṣatrapa. L.23

67. Shoulder-fragment of a jar in red ware decorated with a horizontal band of impressed svastikas bordered by grooved lines. 12.2 × 5.4 cm. So III F 935. Kṣatrapa. L.23

68. Sherd of red ware decorated with a stamped "star" consisting of elevated dots in between three concentric circles. 5.5 × 3.3 cm. So III F 1169. Kṣatrapa. L.23

69. Sherd of a red ware vessel stamped with star-shaped rosette consisting of triangular petals around two concentric circles. 5.1 × 3.5 cm. So III F 1210. Kṣatrapa. L.23

70. Shoulder-fragment of a jar in red ware stamped with a single oblique leaf-shaped design. A Kṣatrapa speciality. 8.5 × 5.9 cm. So III F 1149. Kṣatrapa. L.24/23

71. Shoulder-fragment of a jar in red ware decorated with a series of a stamped leaf variety. 9.5 × 4.0 cm. So III F 1055. Kṣatrapa. L.24

72. Shoulder-fragment of a jar in red-ware stamped with a vertical leaf. 6.4 × 4.3 cm. So III F 1177. Kṣatrapa. L.23

73. Shoulder-fragment of a jar in red ware decorated with horizontal grooves and a stamped leaf variety. 8.2 × 3.5 cm. So III F 606. Out of context.

74. Shoulder-fragment of a vessel in red ware decorated with a band of impressed triangles (zigzag-line). 9.3 × 5.7 cm. So III F 974. Kṣatrapa. L.23

75. Shoulder-fragment of a red ware vessel showing a double band of impressed triangles (zigzag-lines). 4.5 × 4.2 cm. So III F 990. Kṣatrapa. L.24/23

76. Shoulder-fragment of a red ware vessel decorated with a triple band of impressed triangles (zigzag-lines). 4.6 × 5.3 cm. So III F 1019. Kṣatrapa. L.23

77. Rim-fragment of a red ware vessel decorated with a band of triangles and a stamped leaf. 3.8 × 3.2 cm. So III F 897. Early Kṣatrapa. L.24

78. Rim-fragment of a red ware vessel decorated with a double band of impressed triangles above a band of stamped leaves alternating with stamped lotus rosette. 10.6 × 5.0 cm. So III F 1035. L.25 (out of context?)

79. Shoulder and rim of a jar in red ware decorated with horizontal bands of stamped V-design and curved rows of notches. 17.7 × 12.4 cm. So III F 1276. Kṣatrapa. L.23

80. Shoulder-fragment of a red ware vessel decorated with horizontal grooves as well as stamped arcs, rosettes, and a leaf variety. 6.8 × 5.6 cm. So III F 1118. Kṣatrapa. L.23

81. Shoulder-fragment of a jar in red ware decorated with stamped leaves, nandyāvartas, and sun-symbol with oblique rays. 8.6 × 6.6 cm. So III F 933. Kṣatrapa. L.23

82. Shoulder-fragment of a red ware vessel decorated with horizontal grooves and a stamped design shaped like a vase. At the lower edge remains of a loop. 4.3 × 4.4 cm. Kṣatrapa. L.24

Period V. Fragments and Sherds from Levels 22 to 16

83. Shoulder-fragment of a red ware vessel decorated with painted horizontal bands and stamped loops painted over with a gold- coloured wash. 12.0 × 9.0 cm. So III F 300. Kuṣāṇa. L.16/15

84. Sherd of a red ware vessel decorated with an incised band of rhomboid pattern. 5.6 × 5.8 cm. So III F 671. Kuṣāṇa. L.18

85. Fragment of a jar in red ware decorated with an appliqué rib looking like a twisted cord, and an incised and pricked wavy tendril. 10.0 × 5.3 cm. So III F 1002. Kuṣāṇa. L.18

86. Base-fragment of a small red ware bowl with incised triangular "petals" around central circle on the inside. So III F 445. Kuṣāṇa. L.18

87. Sherd of a jar in red ware decorated with an appliqué rib looking like a twisted cord. 12.5 × 6.8 cm. So III F 888. Kuṣāṇa. L.22

88. Sherd of a jar in red ware decorated with an appliqué band showing a row of finger-impressions. 17.4 × 7.9 cm. So III F 247. Kuṣāṇa. L.16

89. Sherd of a jar in red ware decorated with appliqué bands of a design of finger-impressions alternating with a twisted-cord-rib. 11.0 × 6.2 cm. So III F 304. Kuṣāṇa. L.16

90. Sherd of a jar in red ware decorated with grooves and an impressed fish-scale pattern. 13.5 × 11.4 cm. So III F 1131. Kuṣāṇa. L.20/19

91. Rim of a red ware bowl or lamp decorated with appliqué double-crescents. L.4.1 cm. So III F 628. Kuṣāṇa. L.17/16

92. Sherd of a jar in red ware decorated with an appliqué angular svastika showing incised notches. 13.7 × 10.0 cm. So III F 575. Kuṣāṇa. L.19

93. Shoulder-fragment of a red ware jar decorated with a stamped multiple rhomboid design and semicircular creepers. 7.9 × 7.2 cm. So III F 582. Kuṣāṇa. L.22

94. Fragment of a jar in red ware decorated with horizontal grooves, vertical strokes and stamped semicircular garlands. 14.5 × 11.8 cm. So III F 631. Kuṣāṇa. L.21/18

95. Shoulder-fragment of a jar in red ware showing horizontal grooves and stamped V-shaped garlands. 7.0 × 4.9 cm. So III F 363. Kuṣāṇa. L.21/20

96. Sherd of a jar in red ware stamped with a band of crescents (= unclosed circles) and chevrons. 9.2 × 6.8 cm. So III F 557. Kuṣāṇa. L.18

97. Sherd of a red ware jar decorated with stamped double-circles enclosing a dot, and a row of double chevrons. 7.4 × 4.1 cm. So III F 359. Kuṣāṇa. L.18/17

98 Shoulder-fragment of a jar in red ware decorated with horizontal grooves as well as a stamped design of three double circles and semicircular garlands. 6.0 × 4.3 cm. So III F 315. Kuṣāṇa. L.16

99. Shoulder-fragment of a jar in red ware showing two rows of stamped circles with wavy lines in between, and impressed rays and circles below. 15.6 × 7.5 cm. So III F 260. Kuṣāṇa. L.16

100. Shoulder-fragment of a jar in red ware decorated with horizontal rows of dots and circles above fan-like arranged rays hanging down from a horizontal groove. 9.9 × 5.9 cm. So III F 392. Kuṣāṇa. L.16

101. Shoulder-fragment of a jar in red ware with stamped rosettes and the rare design of a flower vase. 10.4 × 6.4 cm. So III F 923. Kuṣāṇa. L.22

102. Sherd of a red ware vessel with a stamped design looking like a vase placed upside down. 5.4 × 4.6 cm. So III F 989. Kuṣāṇa. L.22/21

103. Shoulder-fragment of a jar in red ware decorated with a band of śaṅkhas on grooved ground. 9.6 × 5.1 cm. So III F 896. Kuṣāṇa. L.22/21

104. Sherd of a red ware vessel stamped with a tree-shaped design. 6.2 × 5.3 cm. So III F 434. Kuṣāṇa. L.20

105. Shoulder-fragment of a red ware jar decorated with horizontally grooved lines and a rare floral(?) design. 9.1 × 4.1 cm . So III F 561. Kuṣāṇa. L.19

106. Fragment of shoulder and rim of a red ware vessel richly decorated with horizontal grooves, a band of oblique rows of notches, short strokes and haṃsas between nandyāvartas. 18.0 × 6.1 cm. So III F 1095. Kuṣāṇa. L.21

107. Shoulder-fragment of a jar in red ware decorated with a band of angular svastikas two hooks of which are doubled. 1.9 × 4.8 cm. So III F 621. Kuṣāṇa. L.21

108. Fragment of shoulder and rim of a red ware vessel decorated with stamped rows of 1) svastikas, 2) concentric double circles with dots in centre, and 3) a band of S-shaped design. Below, remains of a horizontal garland. 10.0 × 9.2 cm. So III F 1124. Kuṣāṇa. L.21

109. Shoulder-fragment of a jar in red ware with horizontal grooves and vase-shaped impressions in between. 11.9 × 10.6 cm. So III F 1133. Kuṣāṇa. L.21/20

110. Fragment of shoulder and neck of a red ware vessel decorated with a rib looking like a twisted cord, and a band of stamped vases. 5.6 × 7.5 cm. So III F 642. Kuṣāṇa. L.19

111. Shoulder-fragment of a jar in red ware richly stamped with a band of 1) crossing wavy garlands, 2) flower-bowls(?) placed upside down, and 3) a rib of oblique notches. 11.5 × 5.7 cm. So III F 608. Kuṣāṇa. L.20

112. Fragment of shoulder and neck of a red ware jar decorated with horizontal bands of stamped designs as 1) concentric double circles, 2) a design looking like hands with 6 fingers, and 3) remains of alternating nandyāvartas and rosettes separated by grooved horizontal lines. 10.4 × 5.5 cm. So III F 560. Kuṣāṇa. L.17/16

113. Fragment of shoulder and neck of a red ware vessel richly stamped with horizontal rows of 1) "hands", 2) rhomboid pattern with central dot, 3) curved sets of short strokes, and 4) long vertical strokes. 11.0 × 14.1 cm. So III F 385. Kuṣāṇa. L.18/17

114. Shoulder-fragment of red ware jar decorated with an appliqué rib looking like a twisted cord and stamped "hands". 10.1 × 6.8 cm. So III F 527. Kuṣāṇa. L.18

115. Sherd of red ware vessel with stamped śrīvatsa. 7.3 × 6.0 cm. So III F 766. Kuṣāṇa. L.22

116. Shoulder and neck of a jar in red ware stamped with a horizontal band of śrīvatsas. 6.9 × 4.1 cm. So III F 1062. Kuṣāṇa. L.22

117. Sherd of red ware vessel stamped with a śrīvatsa between horizontal grooved lines. 6.6 × 4.5 cm. So III F 762. Kuṣāṇa. L.21/20

118. Shoulder-fragment of a red ware vessel stamped with a rare type of śrīvatsa. 7.1 × 6.8 cm. So III F 764. Kuṣāṇa. L.21

119. Sherd of red ware vessel with stamped śrīvatsa. 3.6 × 3.2 cm. So III F 765. Kuṣāṇa. L.17

120. Sherd of red ware vessel decorated with two rows of notches and a stamped leaf. 9.0 × 7.3 cm. So III F 1115. Kuṣāṇa. L.21

121. Shoulder-fragment of a jar in red ware stamped with a band of different leaves. Below it a nandyāvarta. 9.9 × 5.9 cm. So III F 511. Kuṣāṇa. L.21

122. Shoulder-fragment of a red ware jar stamped with a variation of leaves, a zigzag border and horizontal grooves. 9.0 × 5.6 cm. So III F 1258. Kuṣāṇa. L.21

123. Shoulder-fragment of a red ware vessel decorated with horizontal grooves separating a row of leaf-variations above and a nandyāvarta between S-shaped pattern below. 9.3 × 7.6 cm. So III F 538. Kuṣāṇa. L.21

124. Rim-fragment of a red ware vase decorated with stamped sun-design, leaves, rhomboid patterns, and grooved horizontal lines. H. 7,5 cm. So III F 97. Out of context.

125. Sherd of a red ware vessel with stamped wheel or rosette. 4.9 × 3.2 cm. So III F 865. Kuṣāṇa. L.21/20

126. Shoulder-fragment of a jar in red ware decorated with a rhomboid design as well as "turning wheels" (whirling sun). 7.2 × 4.7 cm. So III F 1192. Kuṣāṇa. L.20

127. Fragment of a jar in red ware decorated with stamped sun-wheels on the shoulder. 9.7 × 9.5 cm. So III F 1128. Kuṣāṇa. L.21/20

128. Sherd of a red ware vessel stamped with "stars", consisting of rays around two concentric circles with a dot in center. 6.3 × 3.4 cm. So III F 800. Kuṣāṇa. L.18

129. Shoulder-fragment of a vessel in red ware with a horizontal border of impressed triangles and a stamped rosette with elevated dots in the inner circle. 7.9 × 5.3 cm. So III F 513. Early Kuṣāṇa. L.22/21

130. Shoulder-fragment of a vessel in red ware decorated with horizontal grooves with fan-like pendants, and a stamped star-rosette with short rays outside and elevated dots inside the central circle. 12.8 × 9.4 cm. So III F 491. Kuṣāṇa. L.19/18

131. Sherd of a vessel in red ware with a stamped rosette consisting of a wheel with spokes and hub surrounded by seven circles with a dot in center. 8.4 × 6.4 cm. So III F 799. Kuṣāṇa. L.19

132. Shoulder-fragment of a red ware vessel decorated with a semicircle of notches and a stamped rosette with eight petals. 7.7 × 6.3 cm. So III F 534. Kuṣāṇa. L.19

133. Shoulder-fragment of a vessel in red ware decorated with stamped leave-variations and nandyāvarta between horizontally grooved lines. 6.9 × 5.6 cm. So III F 1050. Early Kuṣāṇa. L.22

134. Sherd of a vessel in red ware showing a stamped nandyāvarta. 5.0 × 3.4 cm. So III F 327. Kuṣāṇa. L.20

135. Shoulder-fragment of a red ware vessel decorated with stamped nandyāvartas showing a rather rare flower-like top. 7.5 × 4.8 cm. So III F 1248. Kuṣāṇa. L.21

136. Base-fragment of a small bowl stamped on the inner side with a rosette consisting of a circle with a nandyāvarta in the centre and semicircular leaves on the outer edge. 4.7 × 3.3 cm. So III F 559. Kuṣāṇa. L.17

137. Sherd of a moulded caolin bowl with floral design under a horizontal geometrical border on the outside. 4.6 × 4.3 cm. So III F 522. Kuṣāṇa. L.21

138. Fragment of a moulded caolin bowl reliefed with a lotus rosette and other floral ornaments. H. 3.4 cm. Diam. 9.0 cm. So I 22. Kuṣāṇa. L.18

139. Fragment of a moulded red ware vessel decorated on the outside with a circle of rosette leaves, a band with symbols like svastika, cross-flower, vase, flower, and nandyāvarta, each field separated from the other by a vertical double-line enclosing a row of pearls. Below, remains of a band of haṃsas following one after the other. Smooth red slip. 6.8 × 7.0 cm. So I 40. Kuṣāṇa. L.18

140. Fragment of a mould for a small red ware bowl showing a lotus rosette and semicircular loops attached to a horizontal border line. H. 4.7 cm. Diam. 9.5 cm. So III F 810. Kuṣāṇa. L.20

141. Fragment of a small moulded red ware bowl decorated on the outside with a crude type of rosette with triangular petals and leaves. H. 3.5 cm. Diam. 7.0 cm. So III F 468. Kuṣāṇa. L.18

142. Base-fragment of a small moulded bowl in red ware showing on the outside a crude rosette and rows of short ridges. 7.0 × 5.9 cm. So III F 365. Kuṣāṇa. L.18/17

143. Fragment of a small moulded red ware bowl decorated on the outside with a large svastika(?) and a geometrical border. 5.0 × 3.6 cm. So III F 465. Kuṣāṇa. L.18/17

144. Fragment of a small moulded bowl of red ware decorated on the outside with a turning star and an arrow-shaped design above a horizontal rib. 4.1 × 3.5 cm. So III F 464. Kuṣāṇa. L.17

145. Fragment of a small moulded bowl of red ware decorated on the outside with tree-like pattern in a triangle, each separated by a vertical rib. 8.3 × 6.0 cm. So III F 311. Kuṣāṇa. L.16

146. Fragment of a small moulded bowl decorated on the outside with a simple design of twig-shaped ribs. H. 3.2 cm. Diam. ca. 8.0 cm So III F 312. Late Kuṣāṇa. L.16/15

Period VI. Fragments and Sherds from Levels 15 to 12

147. Jar of red ware, red-slipped, decorated with horizontal black painted horizontal stripes. The colour-nuance of the slip is an unmistakably Gupta variant used in combination with the painted black stripes for bowls and jars. So II 822. Gupta. L.16/15

148. Jar of red ware, red slipped, decorated with horizontal black stripes and painted lobed necklace. So II 508. Gupta. L.14

149. Shoulder-fragment of a vessel in red ware scratched with a zigzag-border and a floral(?) design. B. 13.5 cm. So III F 125. Late Gupta. L.14

150. Brown-slipped sherd decorated with scratched triangles alternately filled with zigzag-lines below a zigzag-border within horizontal grooves. B. 14.0 cm. So III F 75. Post-Gupta. L.13

151. Brown-slipped sherd scratched with curved lines and zigzag arranged vertically in nearly parallel rows separated by vertical lines. 10.3 × 8.4 cm. So III F 124. Post-Gupta. L.12

152. Brown-slipped sherd decorated with a scratched bird enclosed by zigzag-borders. H. 13.5 cm. So III F 123. Post-Gupta. L.12

153. Sherd of red ware decorated with a paddle-mark design of rows of elevated dots between bordering ribs. Mica-washed. 9.9 × 7.6 cm. So III F 273. Post-Gupta. L.12

154. Sherd of a red ware vessel paddled with a design of dots between parallel ribs. Traces of mica. 5.8 × 5.8 cm. So III F 201. Post-Gupta. L.13/12

155. Sherd of a red ware vessel paddled with a design of dots in rhomboid fields. Covered with mica. 5.9 × 4.7 cm. So III F 198. Post-Gupta. L.13/12

156. Sherd of a red ware vessel decorated with appliqué pointed elevated dots. Painted over with mica. 6.2 × 5.2 cm. So III F 188. Post-Gupta. L.13/12

157. Sherd of red ware decorated in relief with fish-scale pattern. Covered with mica. 12.5 × 6.2 cm. So III F 183. Post-Gupta/Early Medieval. L.12

158. Sherd of red ware decorated in relief with a floral design. Traces of mica. B. 8.8 cm. So III F 96. Post-Gupta/Early Medieval. L.12

159. Fragment of a red ware vessel decorated with a complicated moulded design of elevated dots, circles, ribs and curved lines. Painted over in red, black, and gold. 10.0 × 7.5 cm. So III F 341. Gupta. L.16/15

160. Fragment of a moulded red ware vessel with elevated curved lines. Painted over in olive and red-brown . 4.3 × 3.5 cm. So III F 342. Gupta. L.16/15

161. Fragment of a moulded red ware bowl with a design of two concentric circles enclosing an elevated dot. 9.5 × 7.5 cm. So III F 343. Gupta. L.16/15

162. Fragment of a small moulded red ware bowl decorated with stylized petals and a horizontal rim-line. 5.5 × 5.8 cm. So III F 147. Post-Gupta. L.13/12

163. Fragment of a small moulded red ware bowl with a design of vertical ribs. 4.0 × 6.3 cm. So III F 144. Post-Gupta. L.13/12

164. Fragment of a small moulded bowl in red ware covered with a rhomboid lattice design. 4.0 × 7.2 cm. So III F 239. Post-Gupta/Early Medieval. L.12/11

165. Fragment of a moulded red ware bowl decorated with symbols. 5.2 × 12.8 cm. So III F 288. Post-Gupta. L.12

166. Fragment of a moulded red ware bowl with a lotus rosette and wave bands. 5.0 × 6.4 cm. So III F 141. Post-Gupta/Early Medieval. L.12/11

167. Fragment of a moulded red ware bowl with a rosette within a geometrical setting of lines. 4.5 × 5.8 cm. So III F 152. Post-Gupta. L.12

168. Fragment of a moulded red ware bowl decorated with two lotus rosettes one above the other in sectors separated by vertical double-ribs. Along the bottom a horizontal line of elevated dots (pearl-border). 7.0 × 13.7 cm. So III F 134. Post-Gupta. L.12

169. Fragment of a moulded red ware bowl decorated with a lotus-rosette in separate sectors. 8.0 × 6.6 cm. So III F 277. Post-Gupta. L.13/12

170. Small fragment of a moulded red ware bowl with śaṅkhas in separate sectors. 4.8 × 4.8 cm. So III F 85. Post-Gupta/Early Medieval. L.12/11

171. Sherd of a moulded red ware vessel decorated with a complicated design of floral and geometrical pattern. 7.0 × 4.8 cm. So III F 177. Post-Gupta. L.12

172. Sherd of a moulded red ware vessel decorated with a complicated labyrinth design of elevated lines. 6.2 × 6.0 cm. So III F 156. Post-Gupta. L.12

173. Shoulder-fragment of a moulded red ware vessel decorated with two bands of animals one behind the other, separated by horizontal ribs. 9.1 × 4.9 cm. So III F 200. Post-Gupta/Early Medieval. L.12/11

Period VII/VIII. Fragments and Sherds from Levels 12 to 1

174. Fragment of a big jar, red-slipped, decorated with black painted horizontal stripes, oblique lozenges, zigzag-line, delicately painted swans, a lobed necklace, and dots on the rim. So II 849. Post-Gupta/Early Medieval. L.13/12

175. Fragment of thin grey ware, white slipped, decorated with incised and painted floral and geometrical pattern in olive colour. 10.9 × 7.9 cm. So III F 61. Late Medieval/Early Islamic. L.10

176. Fragment of thin grey ware, white slipped, decorated with incised and painted floral pattern in olive colour. 8.7 × 5.8 cm. So III F 62. Late Medieval/Early Islamic. L.10

177. Sherd of a red ware vessel, red polished on the outside, painted with silvery rays. 4.0 × 3.2 cm. So III F 167. Islamic. L.7

178. Globular jar, red-slipped, decorated with black and white painted ornaments. So II 3081. Jāṭ L.4

179. Carinated jar, red-slipped, with black painted decoration. So II 233. Jāṭ. L.4

180. Shoulder-fragment of a red ware vessel decorated with groups of incised lines arranged in a zigzag-design between bands of horizontal grooves. 7.8 × 4.3 cm. So III F 114. Islamic. L.7/6

181. Sherd of thin red ware decorated with scratched leaves on white slipped ground. 5.7 × 4.9 cm. So III F 504. Jāṭ. L.4

182. Rim-fragment of an egg-coloured red ware bowl decorated with a scratched fish-scale pattern below parallel lines. 2.5 × 2.5 cm. Jāṭ. L.4

183. Sherd of a black-slipped vessel decorated with stamped stars and circles between horizontal grooves. 4.9 × 5.1 cm. So III F 24. Jāṭ. L.5

184. Sherd of a moulded yellow-brown vessel decorated with a floral design and a row of circles filled with dots. 5.0 × 5.0 cm. So III F 52. Islamic. L.9

185. Sherd of soft light brown, white slipped moulded vessel, on the outside with rows of floral design bordered with a pearl-band. 5.4 × 4.4 cm. So III F 34. Islamic. L.8/7

186. Fragment of a soft light brown moulded vessel, on the outside with large circles and star design surrounded by geometrical patterns. 7.4 × 4.9 cm. So III F 32. Islamic. L.8/7

O. POTTER'S STAMPS

The excavation yielded twentytwo terracotta objects which are undoubtedly potter's stamps or fragments of such. Sixteen of them come from Kuṣāṇa levels, four are surface finds but can be allotted to the Kuṣāṇa period, two pieces have been found in Gupta levels. One of these objects is not a stamp but a potter's mould for the decoration of small bowls. With the exception of five unproductive fragments the seventeen remaining specimens are listed here.

Periods V/(VI). Potter's Stamps from Levels 20 to (13)

1. Double-faced stamp with 1) a large semicircular design consisting of a row of holes and, above it, a band of vertical strokes, and 2) a small round rosette formed of the same patterns as contained in no. 1.
Diam. 6.1/3.1 cm. So III A 17. Kuṣāṇa. L.18

2. Double-faced stamp with 1) a semicircle of vertical notches and 2) a small circle impressed with notches.
Diam. 6.0/3.3 cm. So III A 939. Kuṣāṇa. L.18

3. Stamp with conical handle showing a slightly mutilated nandyāvarta symbol.
L. 4.8 cm. So III A 1851. Kuṣāṇa. L.20

4. Stamp with perforated conical handle showing a nandyāvarta symbol different from no. 3.
L. 4.5 cm. H. 2.6 cm. So III A 1700. Kuṣāṇa. L.20

5. Stamp with conical handle deeply carved with a nandyāvarta symbol of the spiral type.
L. 4.3 cm. H. 2.8 cm. So III A 135. Kuṣāṇa (out of context).

6. Stamp with stubby rounded handle carved with a nandyāvarta symbol of the leaf type.
L. 3.7 cm. H. 2.5 cm. So III A 687. Kuṣāṇa. L.16

7. Stamp with conical handle carved with a nandyāvarta symbol of cracknel type.
L. 3.6 cm. H. 2.0 cm. So I 34. Kuṣāṇa (out of context).

8. Stamp with tapering handle carved with a rosette of pointed leaves.L. 6.5 cm. Diam. 4.2 cm. So III A 1142. Kuṣāṇa. L.17

9. Double-faced stamp with tapering handle carved with 1) a larger rosette consisting of two concentric circles surrounded by smaller circles, and 2) a smaller but similar rosette as 1).
L. 3.8 cm. Diam. 2.9 cm. So III A 1106. Kuṣāṇa. L.20

10. Stamp with tapering handle carved with a design similar to no. 9 but of cruder make.
L.3.8 cm Diam. 3.6 cm. So III A 828. Kuṣāṇa. L.16

11. Stamp with a pedestal-shaped handle bearing rosette design in the centre surrounded with a band of vertical strokes.
L.4.5 cm. ∅ 3.9 cm. So III A 114. Kuṣāṇa (out of context).

12. Stamp with a stepwise tapering handle bearing rosette design in the centre surrounded with two bands of ray-like strokes.
3.9 × 6.2 cm. So III A 15. Kuṣāṇa (out of context).

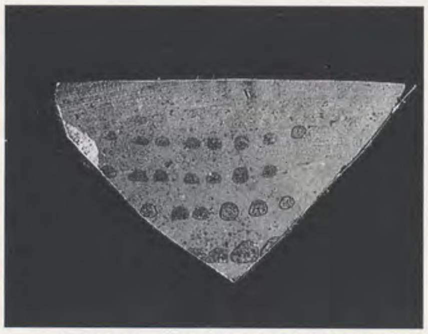
13. Mutilated stamp with tapering handle bearing a "geometrical" rosette with a spiral in the centre and with a surrounding band of tripartite "rays" intended to continue the inner lines. The design gives the impression of movement.
H. 3.7 cm. Diam. 5.7 cm. So III A 902.
Found in Late Gupta L.14/13

14. Small pottery stamp with sharply cut rosette having triangular leaves surrounding two concentric circles forming the slightly deepened centre.
H. 1.5 cm. Diam. 2.0 cm. So III A 685. Kuṣāṇa. L.17

15. Fragment of a stamp with the carved design of seven concentric circles.
H. 2.2 cm. ∅ 9.8 cm. So III A 1277. Kuṣāṇa. L.19

16. Stamp with long tapering handle carved with a spiral ending in a hole in the centre.
H. 5.1 cm. Diam. 3.1 cm. So III F 824.
Found in Late Gupta L.14

17. Potter's mould for the decoration of a small bowl with a design of a rosette having punctured leaves, meant for producing elevated dots.
Diam. 7.9 cm. So III A 2050. Kuṣāṇa. L.17



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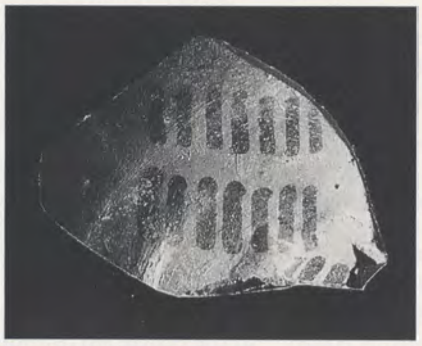

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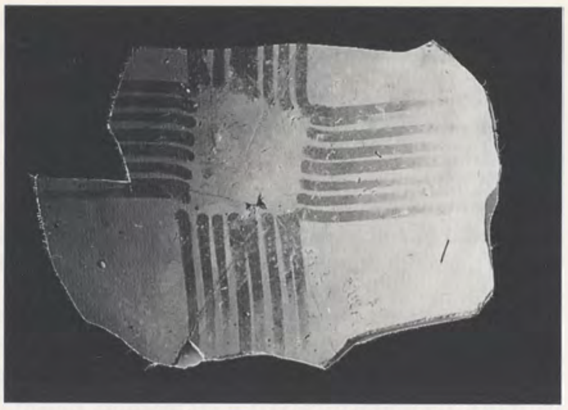

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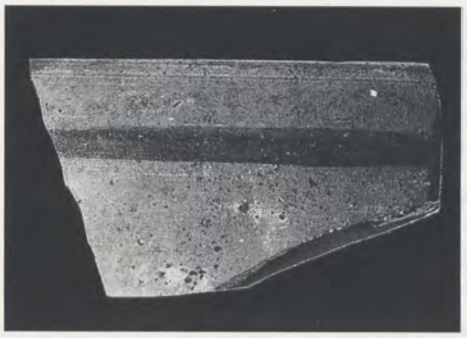

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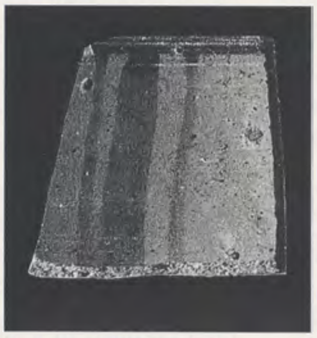

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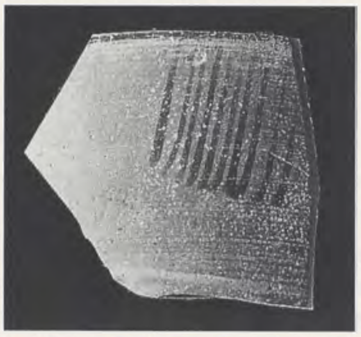

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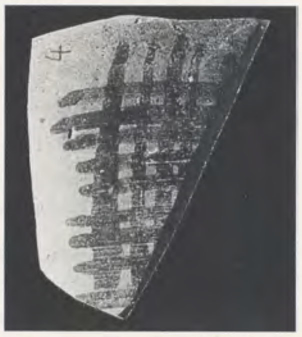

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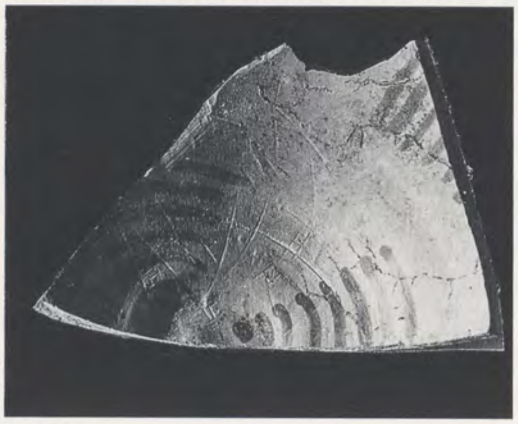

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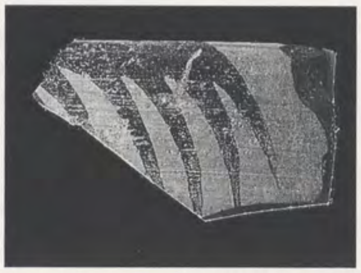

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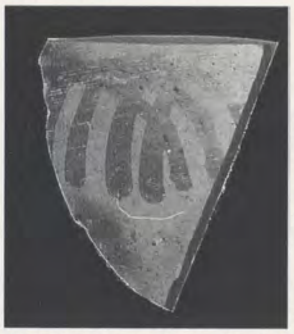

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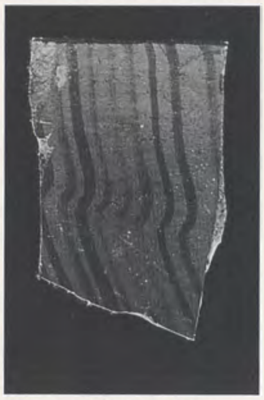

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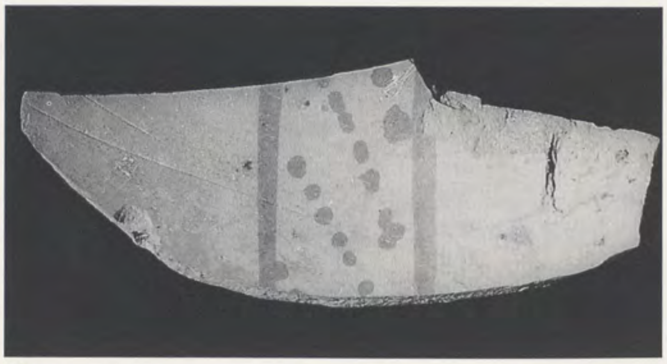

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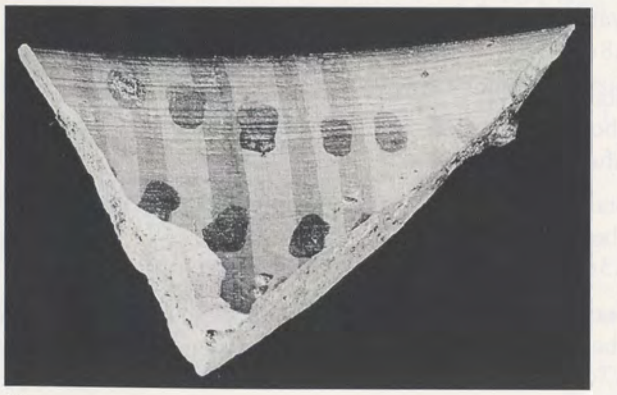

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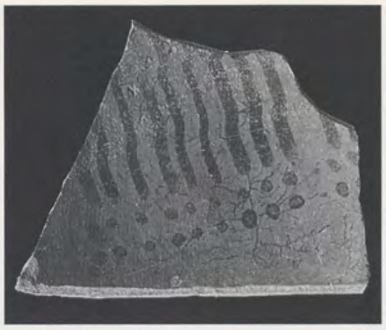
Decorated Pottery, Period I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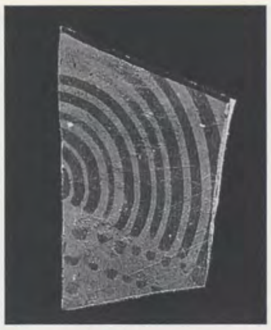
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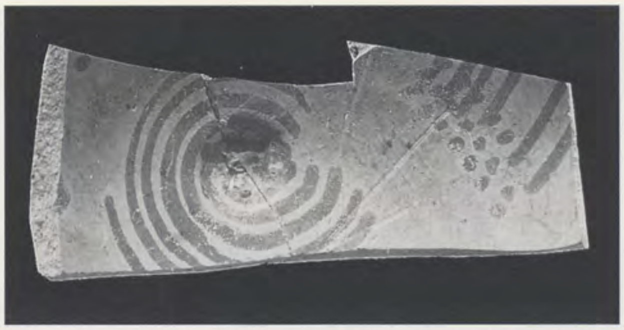
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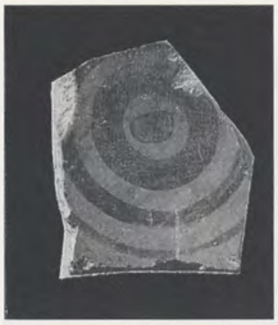
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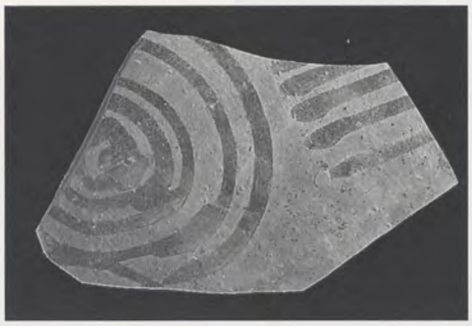
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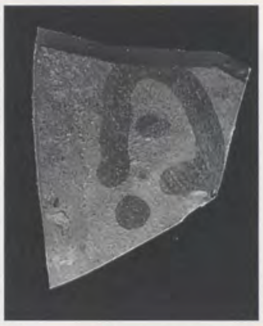
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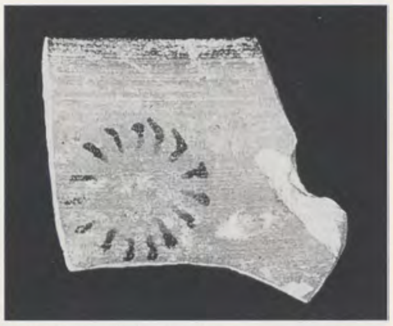
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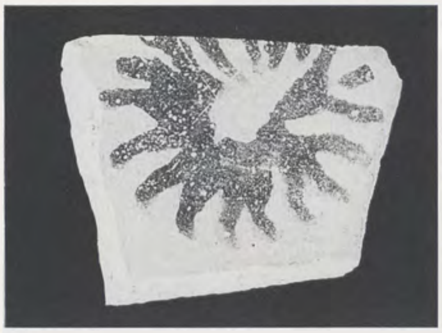
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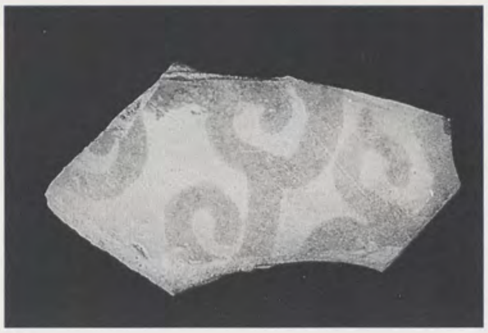
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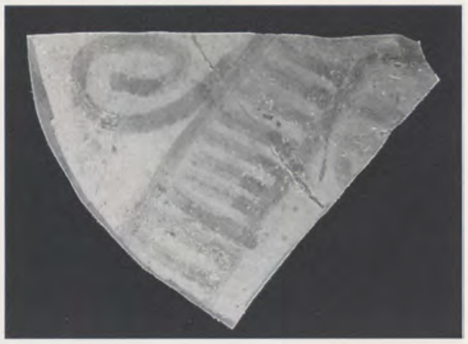
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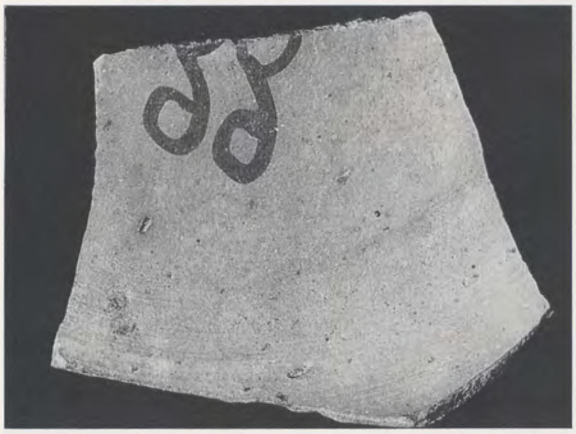
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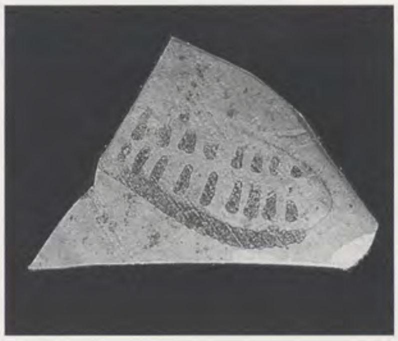
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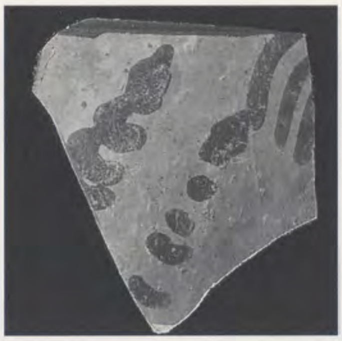
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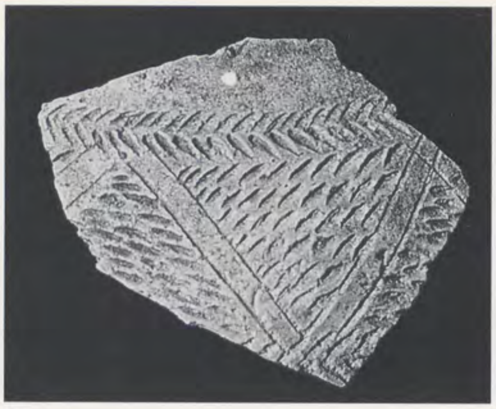
Decorated Pottery, Period I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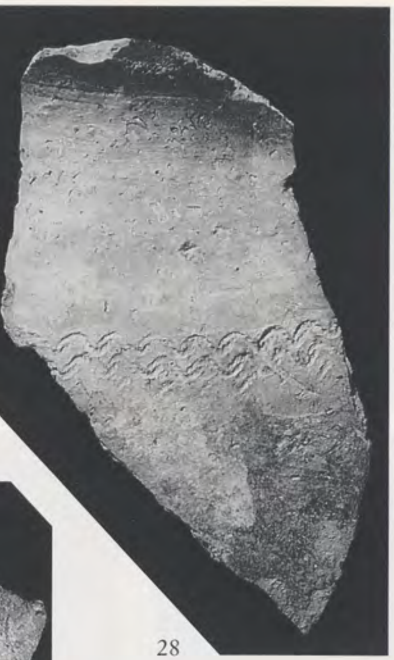
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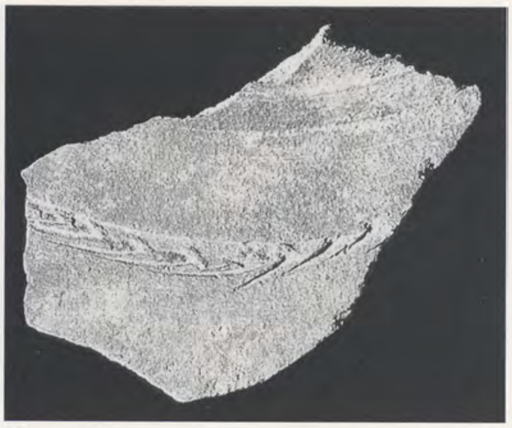
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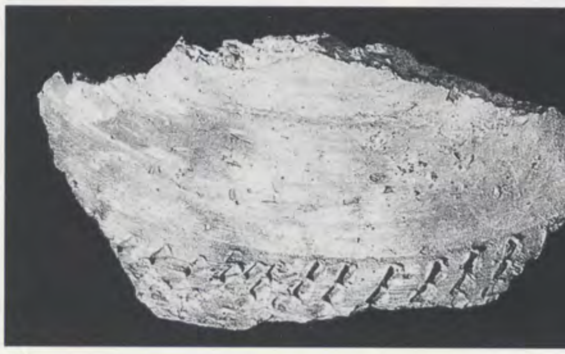
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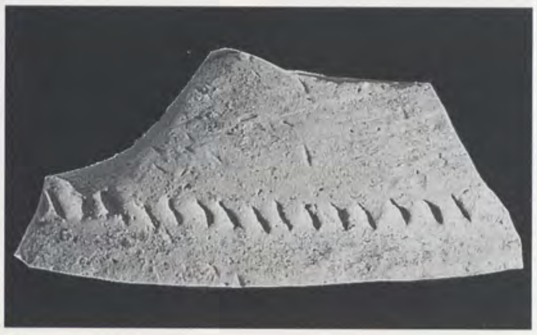
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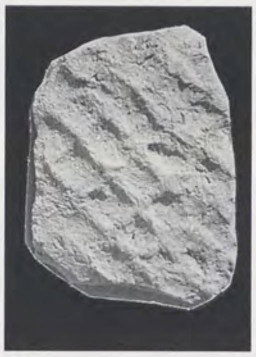
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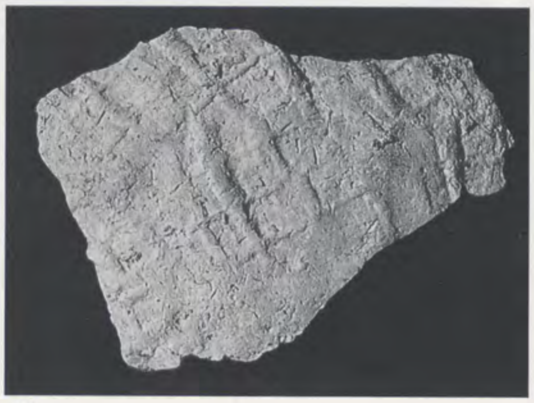
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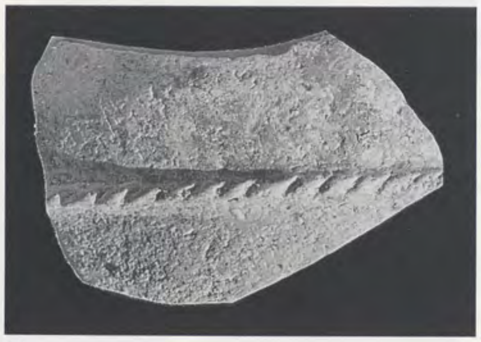
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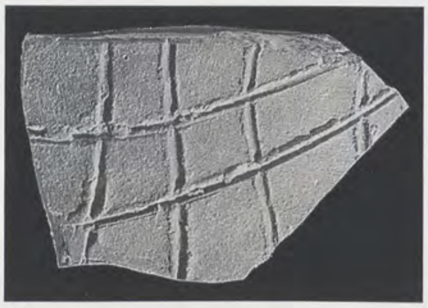
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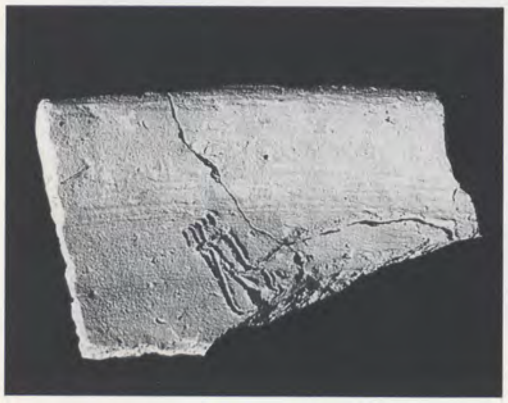
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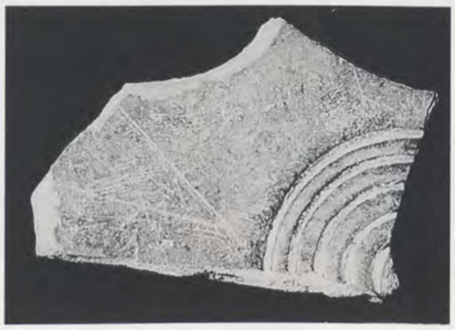
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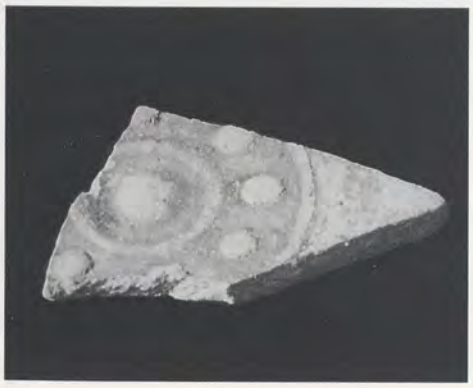
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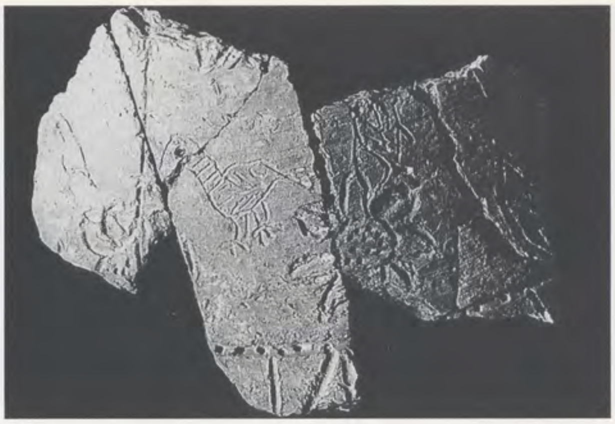
Decorated Pottery, Period I (27–34), Period II (35–38)



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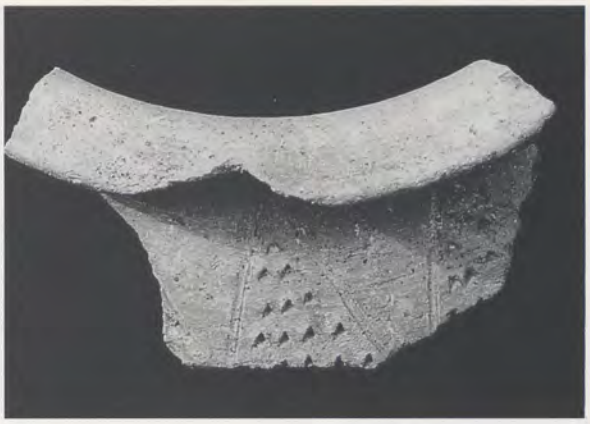

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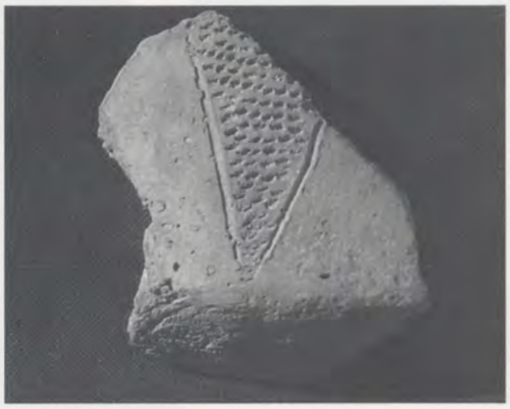

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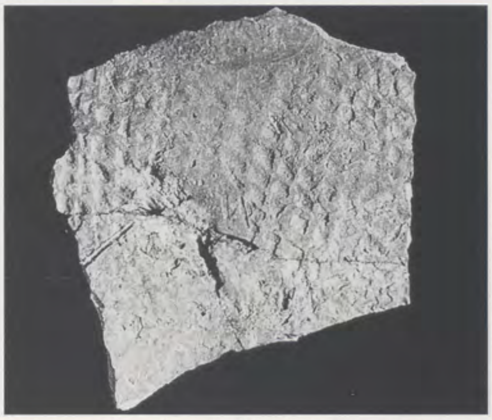

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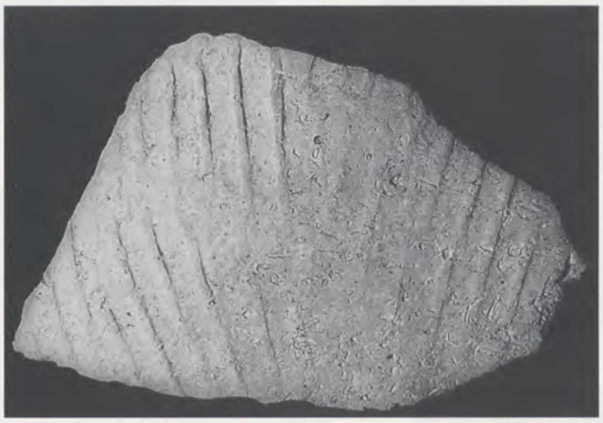

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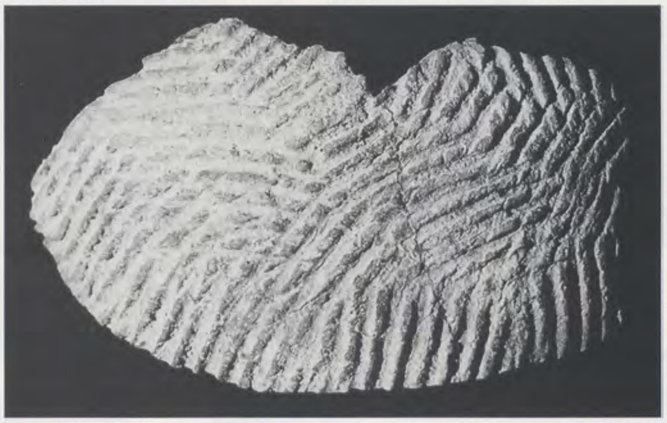

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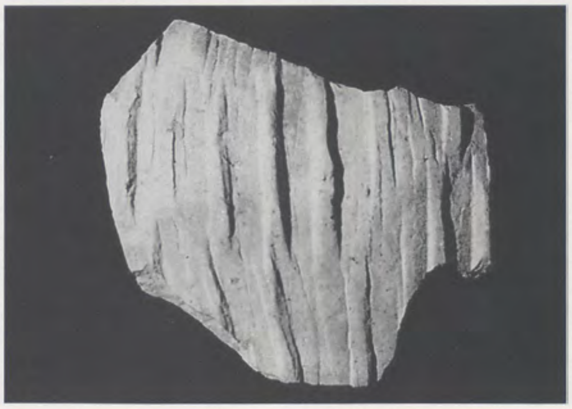

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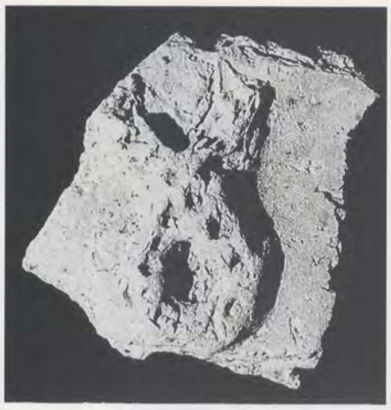
Decorated Pottery, Period III



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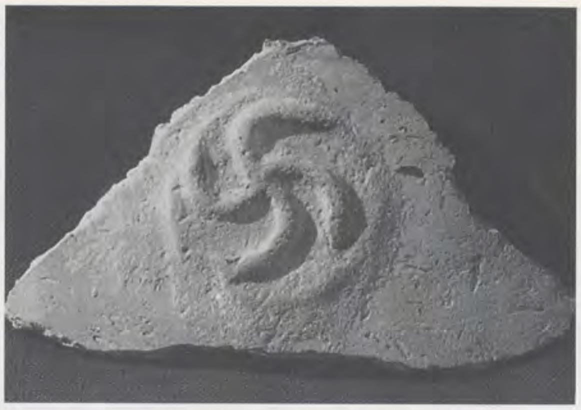

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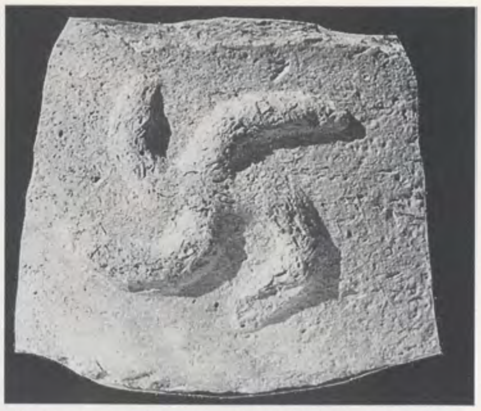

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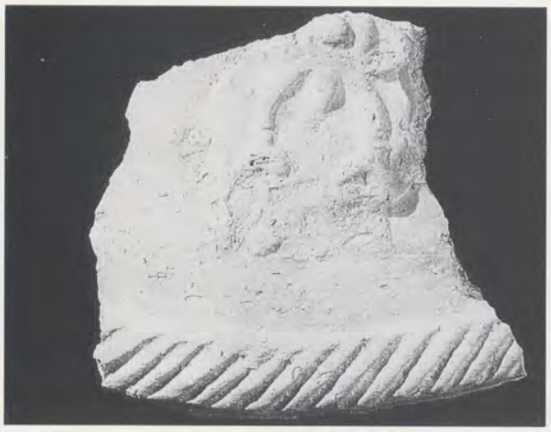

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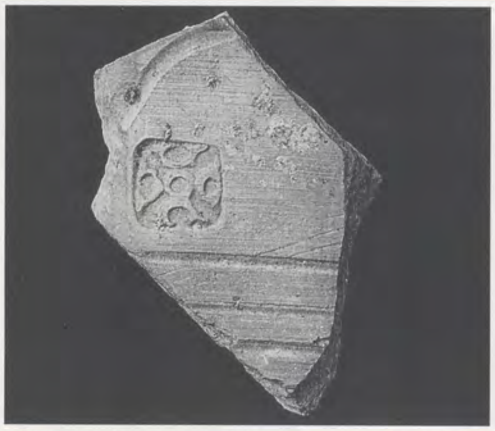

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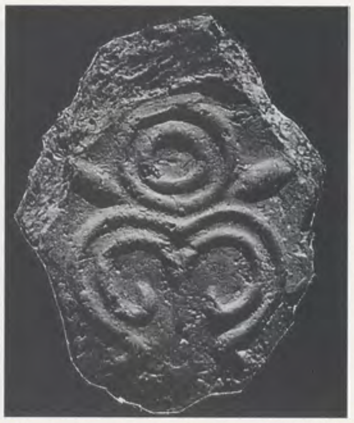

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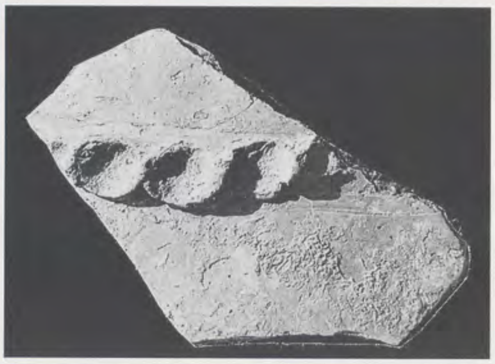

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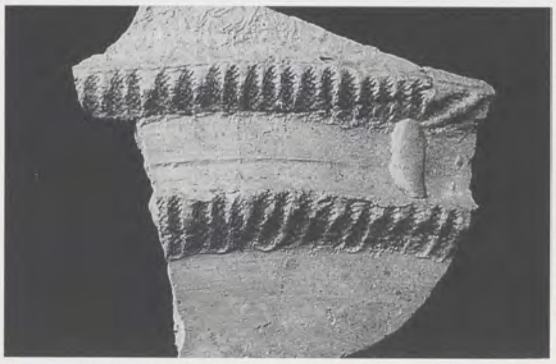

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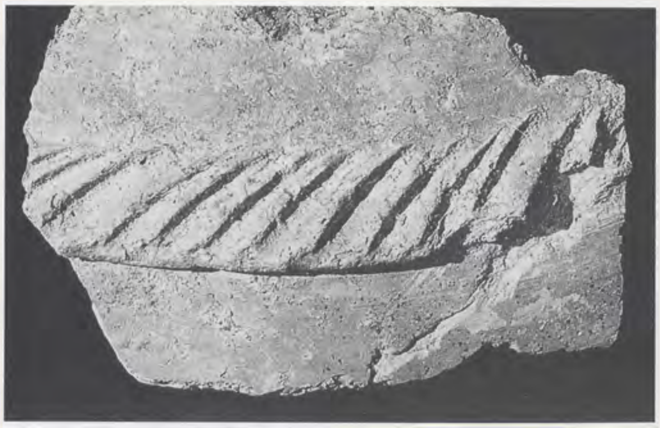

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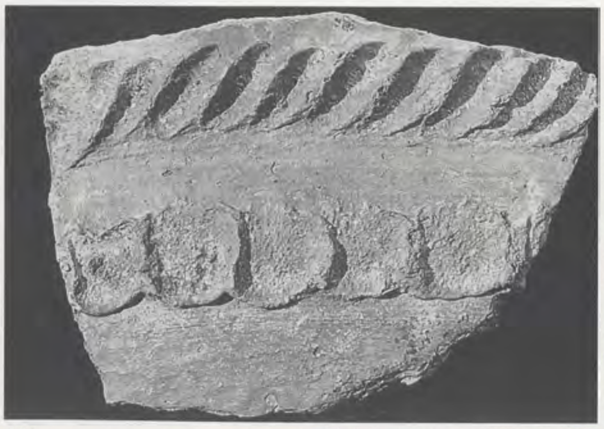

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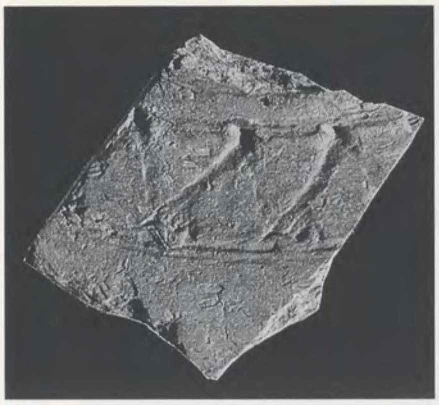
Decorated Pottery, Period III



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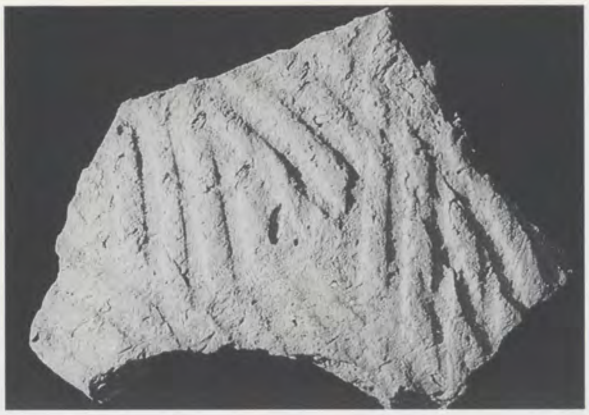

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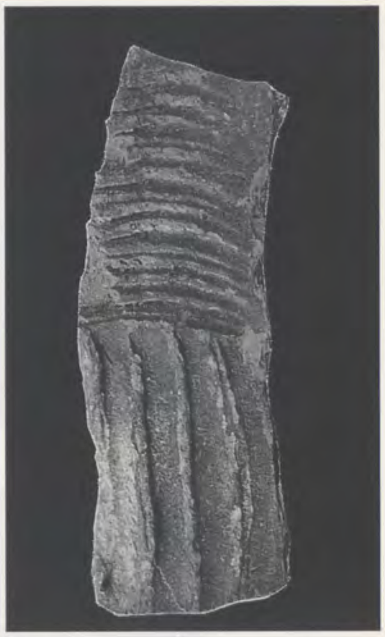

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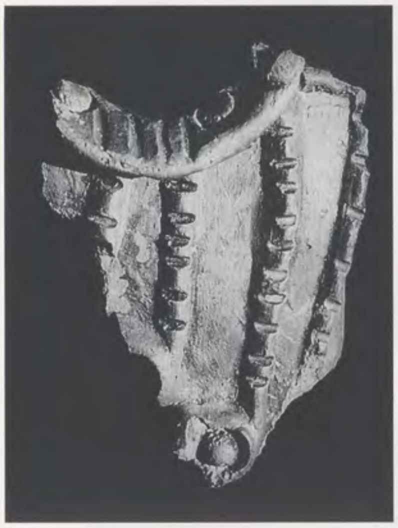

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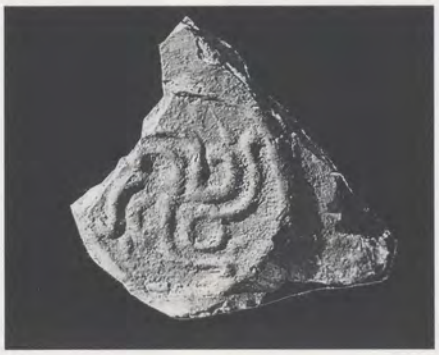

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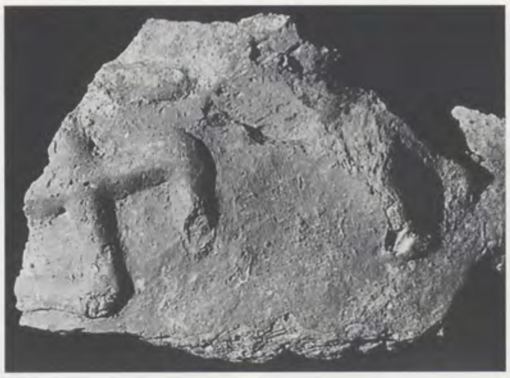

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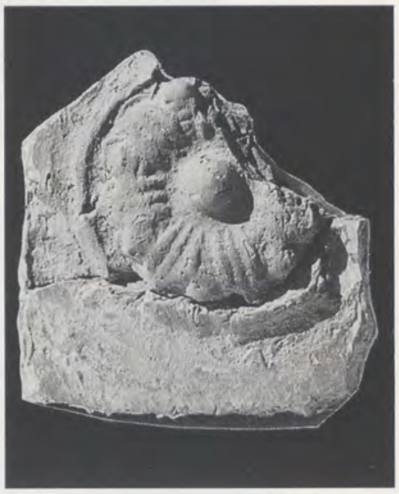

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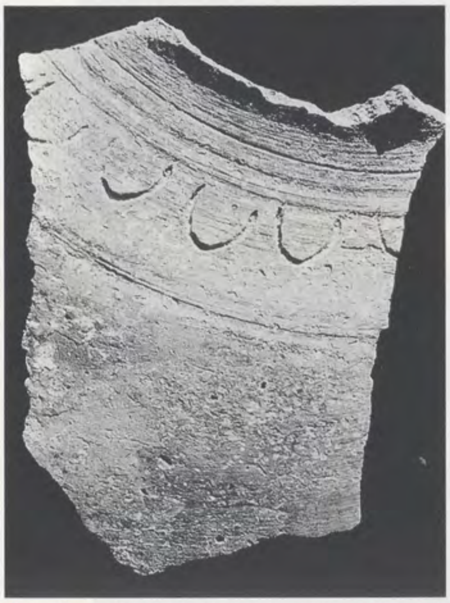

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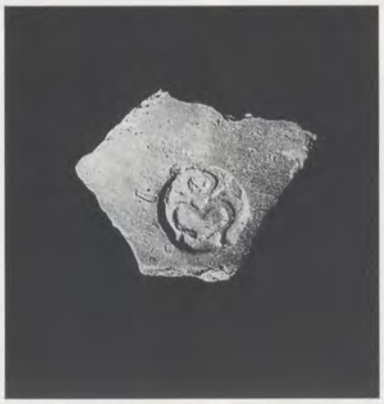

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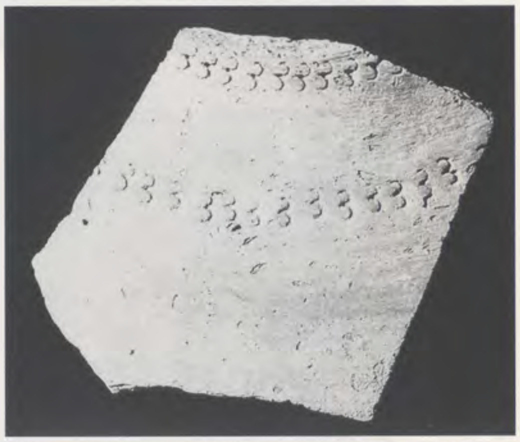

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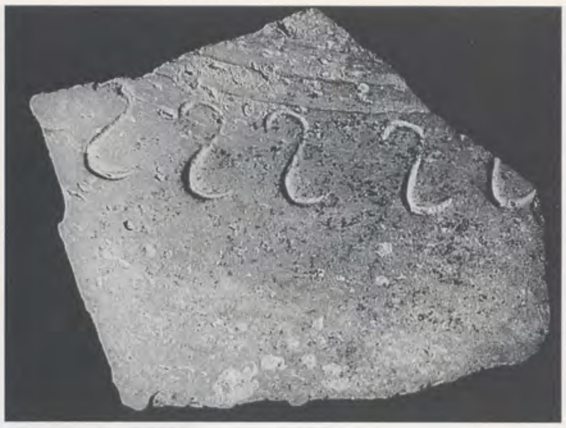
Decorated Pottery, Period IV



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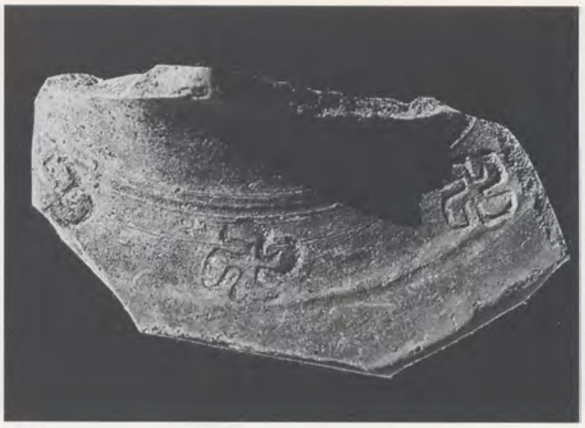

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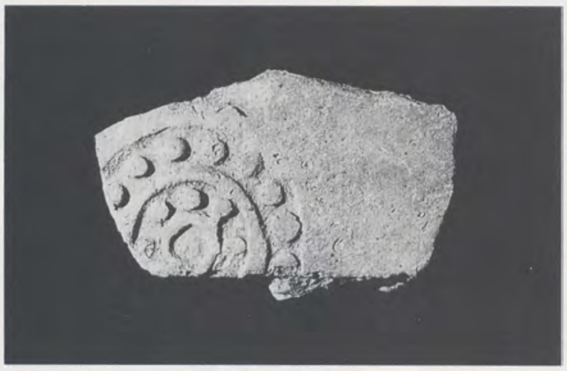

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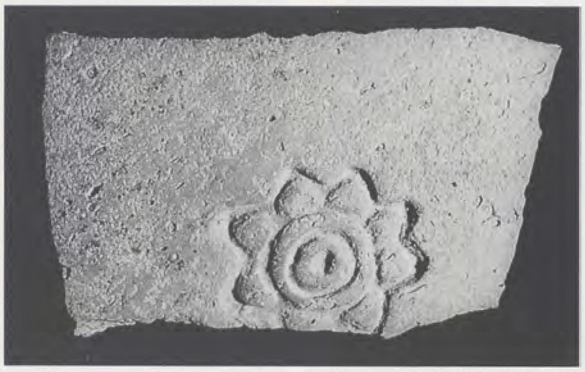

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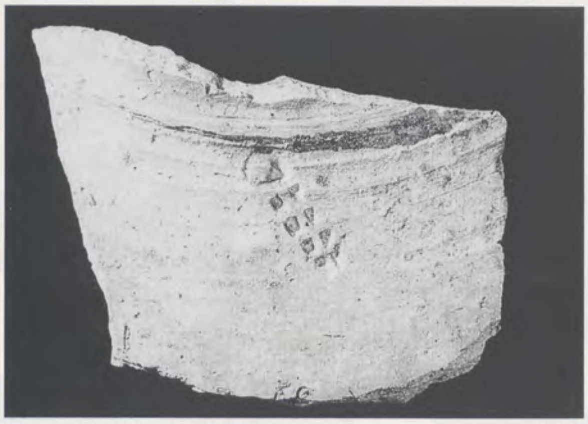

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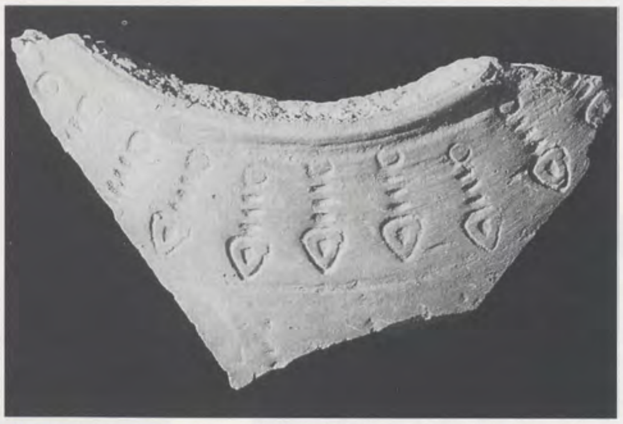

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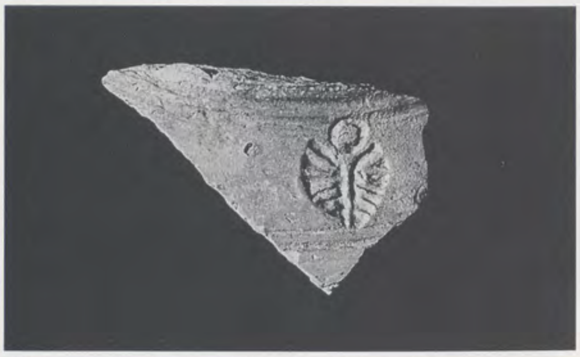

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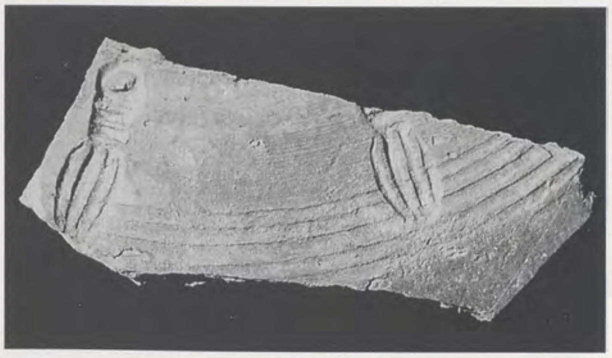

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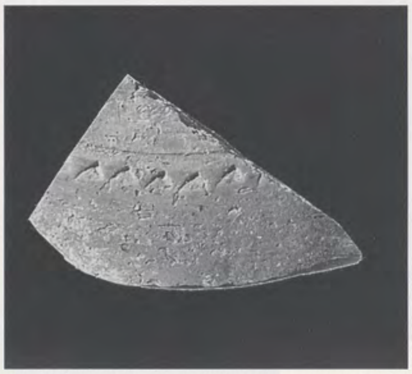
Decorated Pottery, Period IV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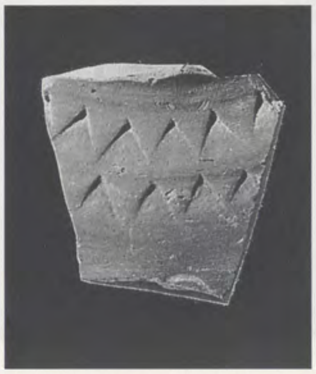
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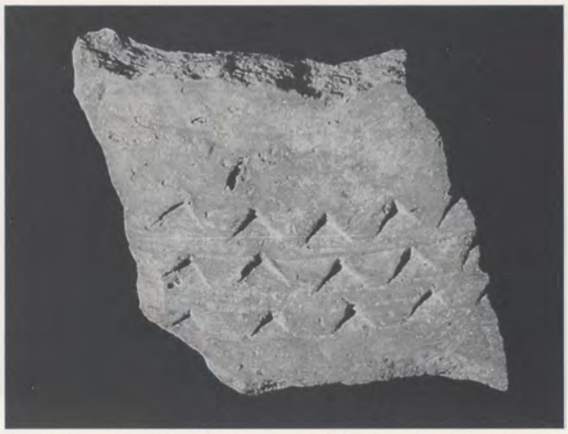
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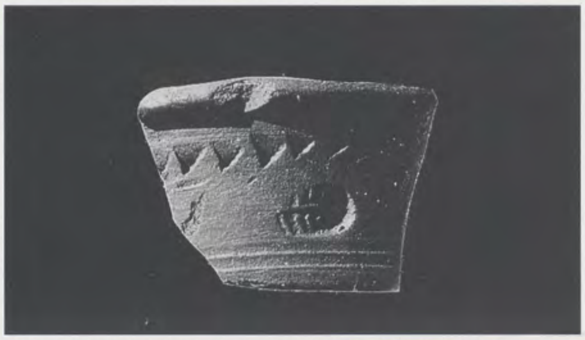
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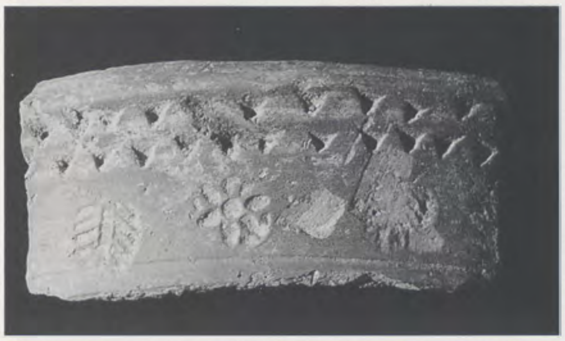
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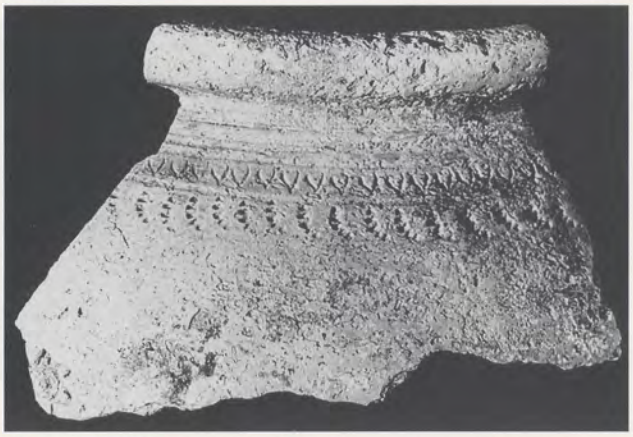
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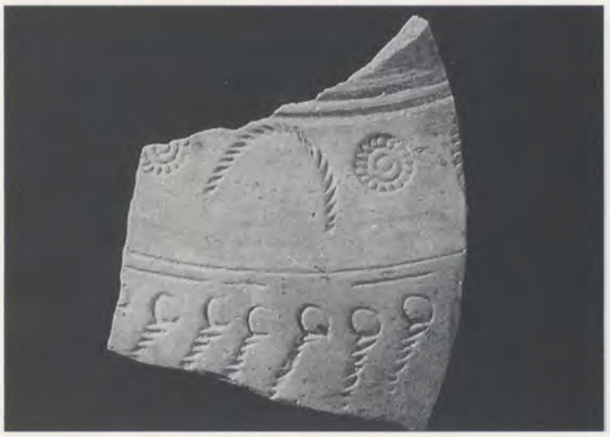
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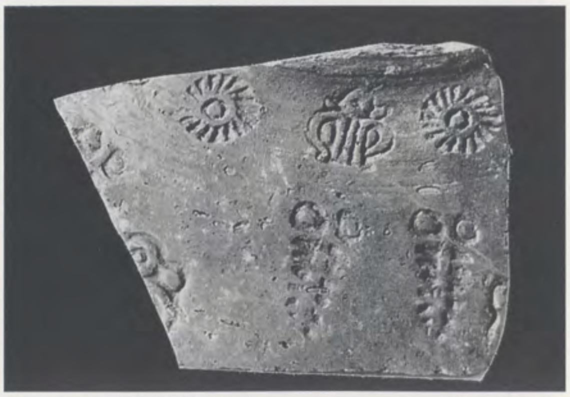
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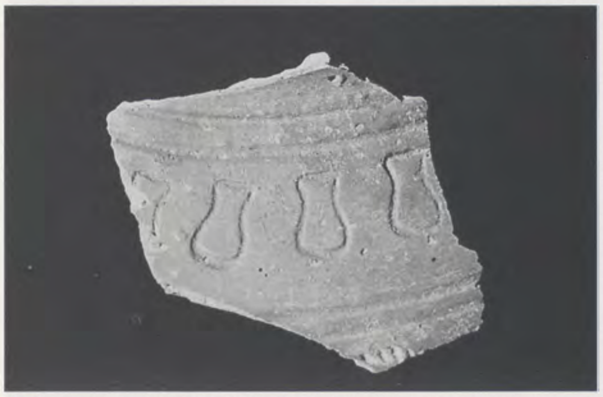
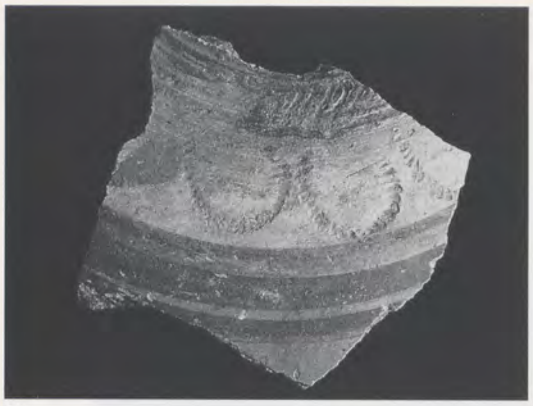

82

Decorated Pottery, Period IV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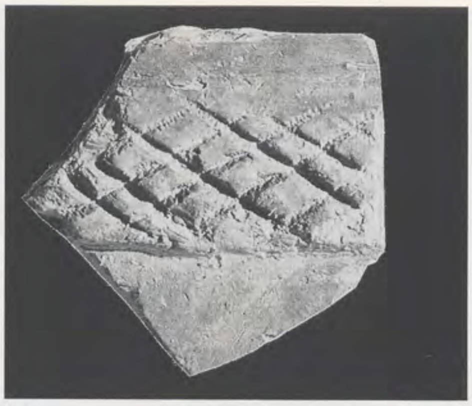
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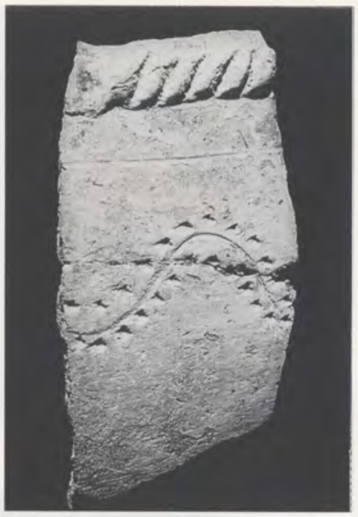
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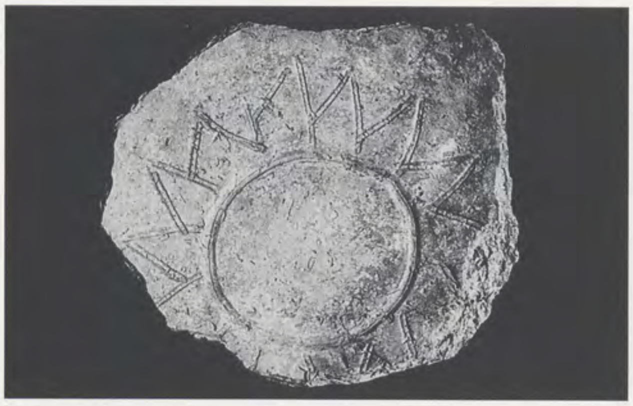
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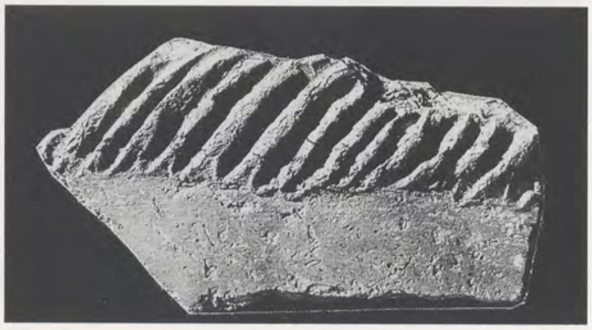
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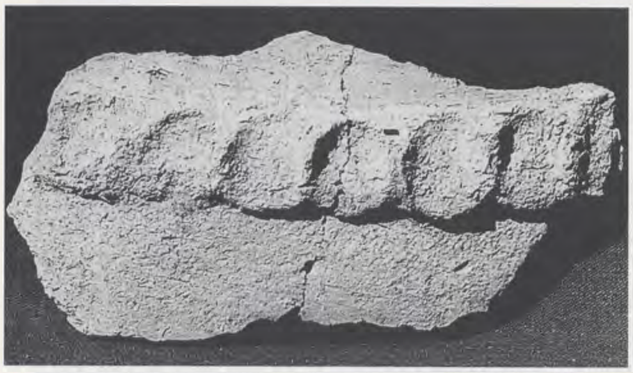
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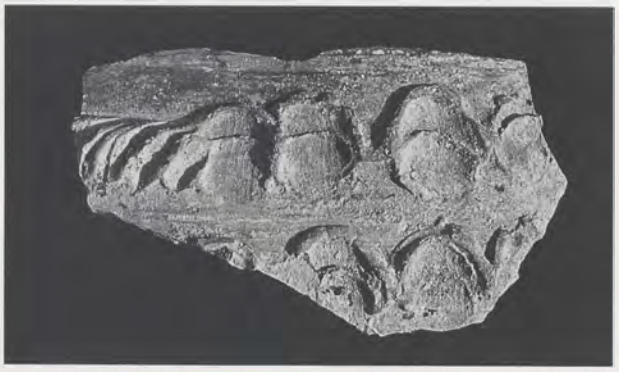
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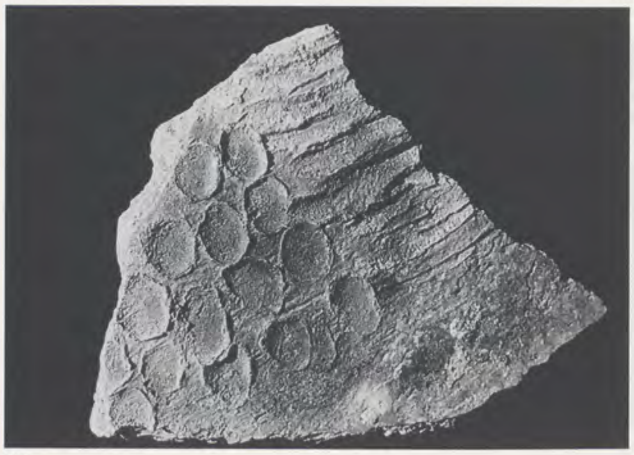
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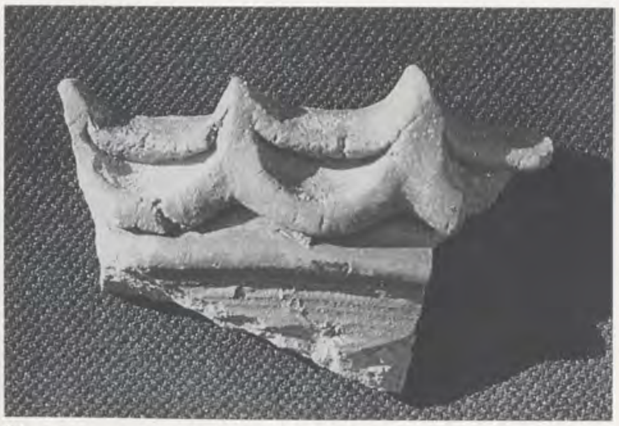
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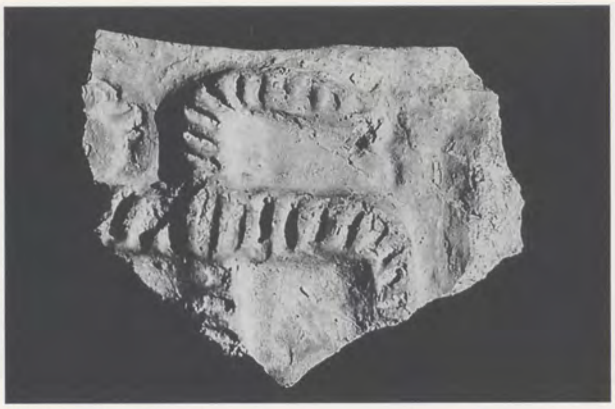
Decorated Pottery, Period V



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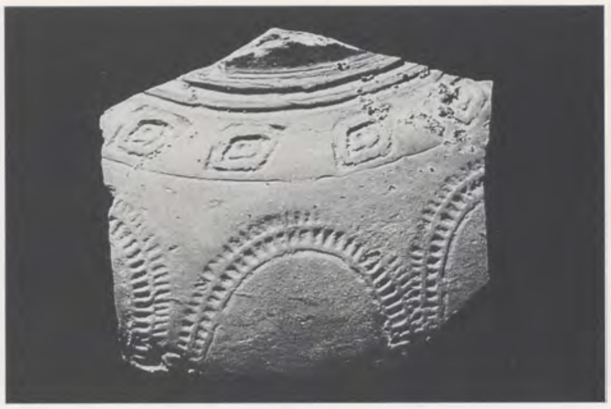

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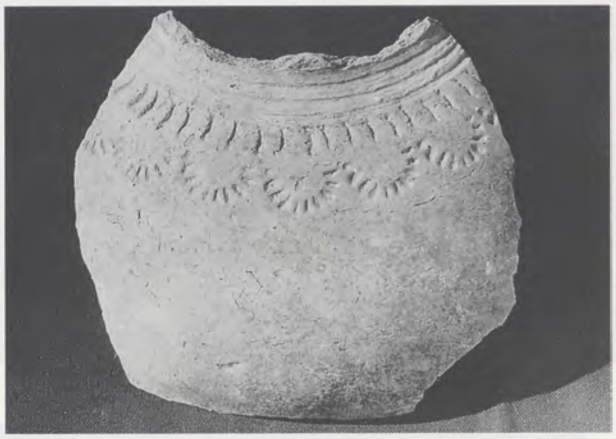

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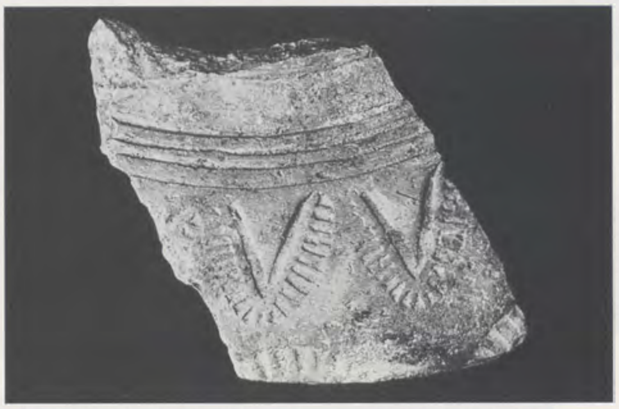

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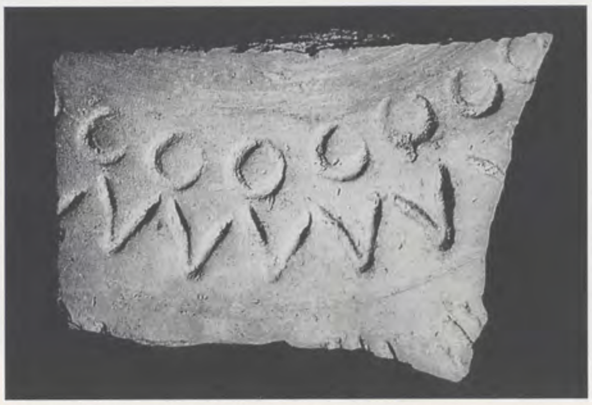

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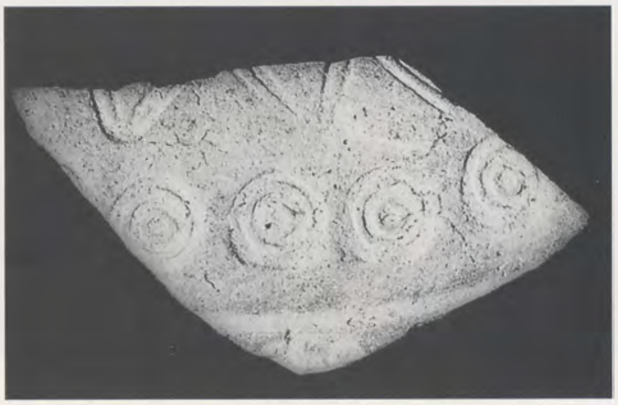

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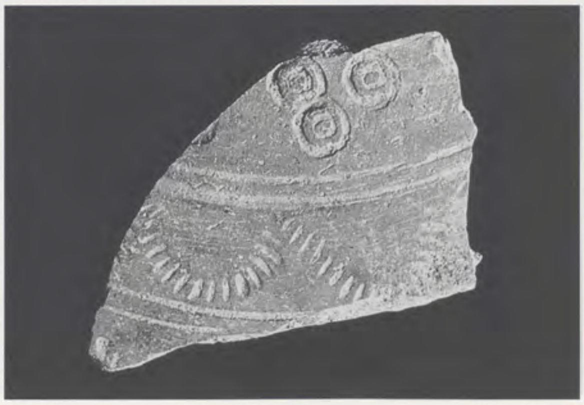

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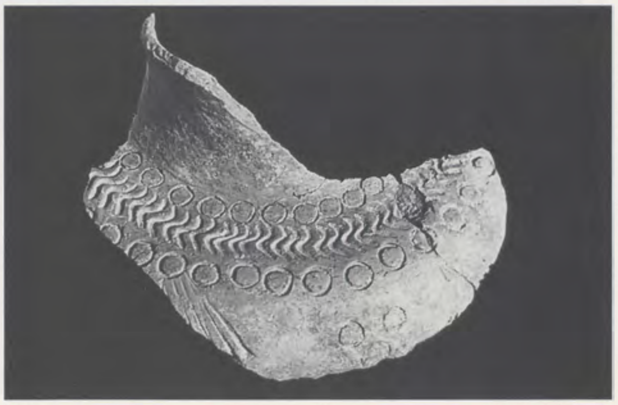

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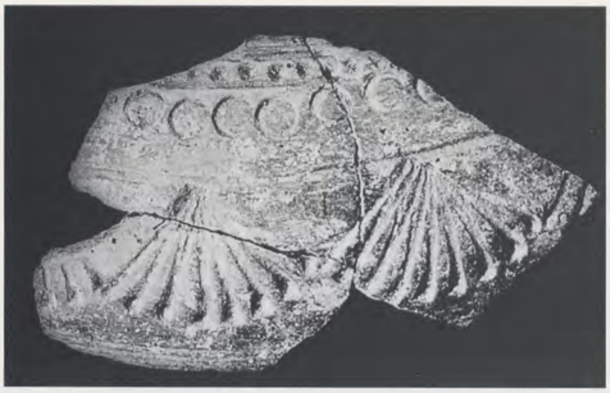
Decorated Pottery, Period V

24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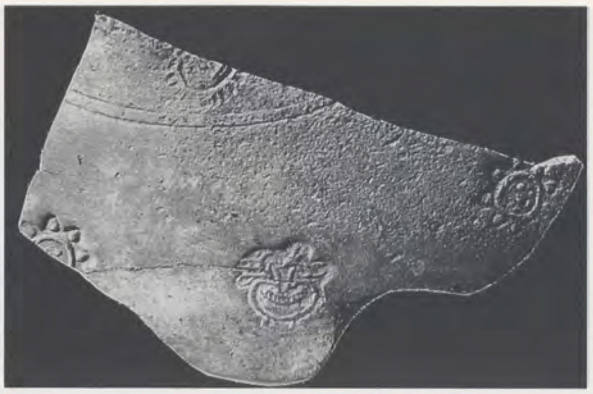
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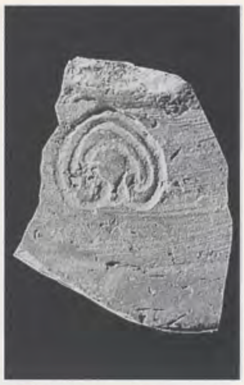
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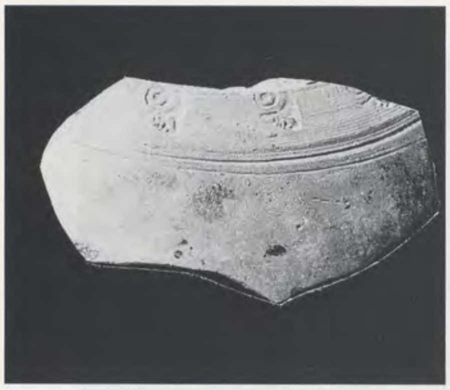
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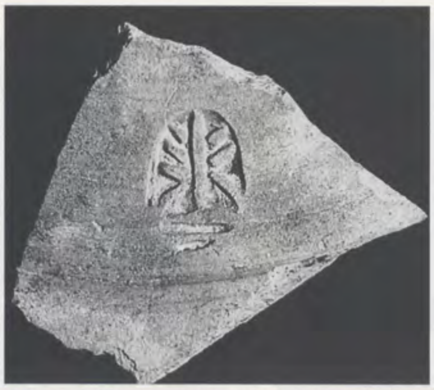
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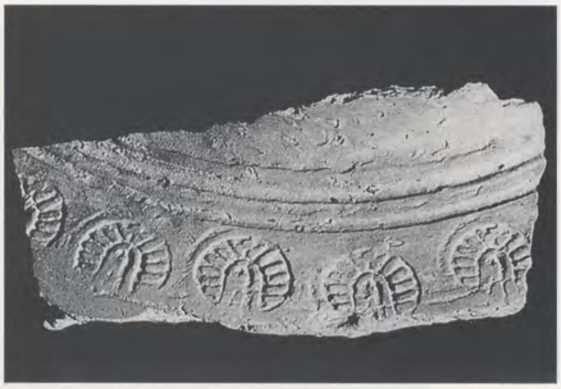
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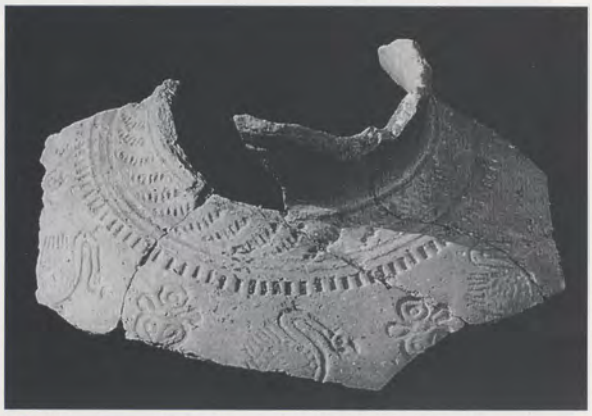
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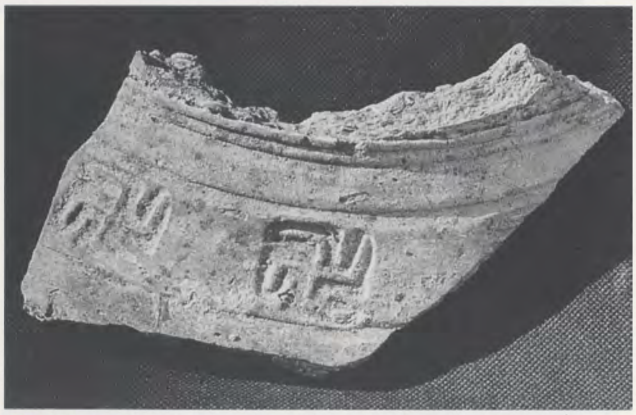
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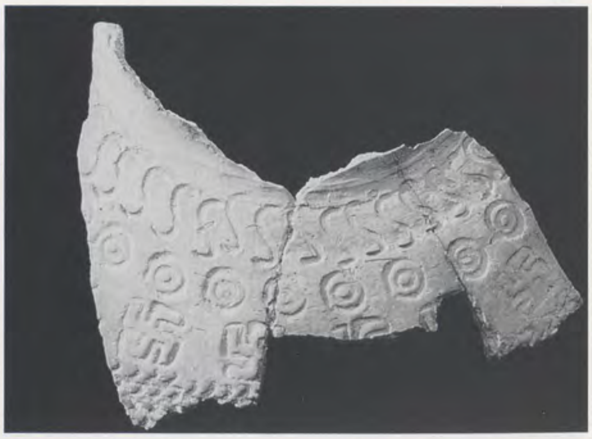
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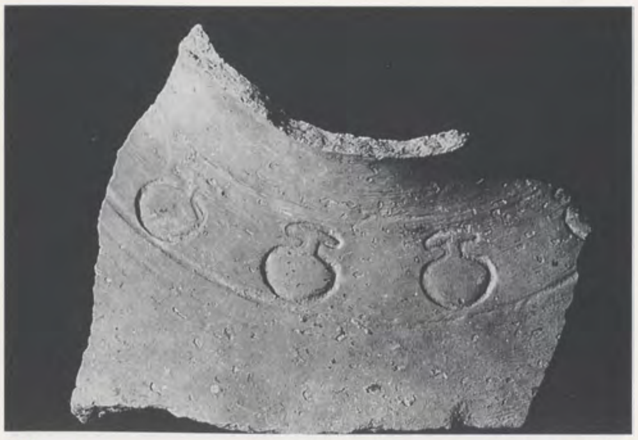
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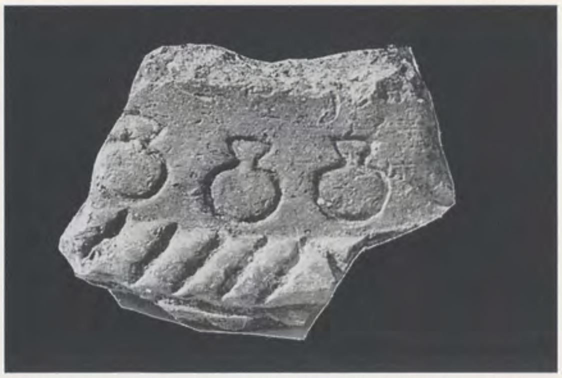
Decorated Pottery, Period V



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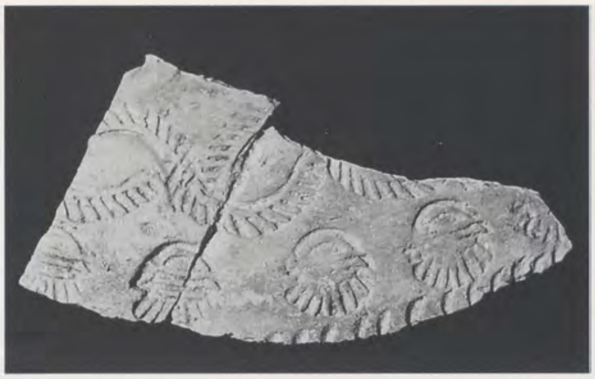

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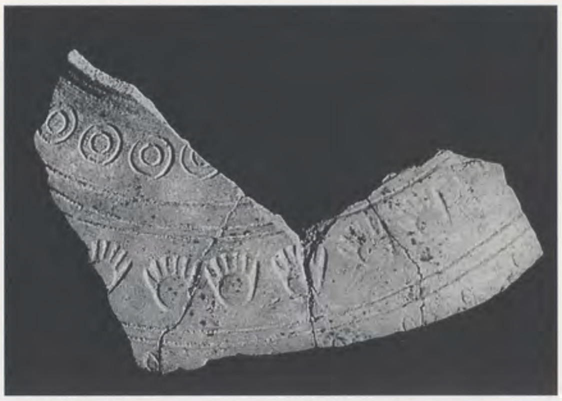

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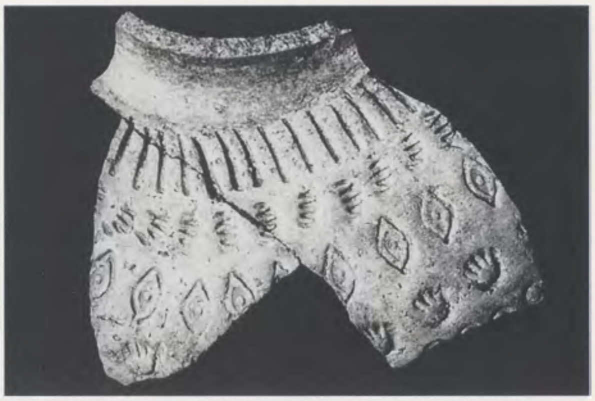

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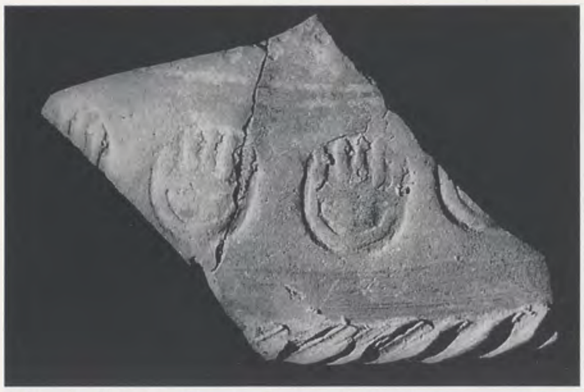

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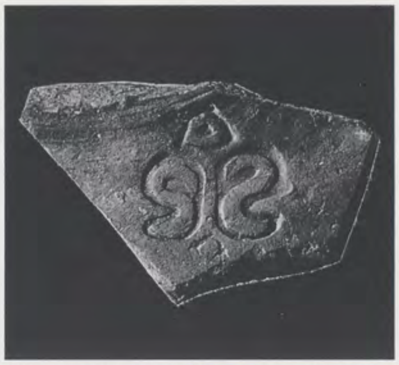

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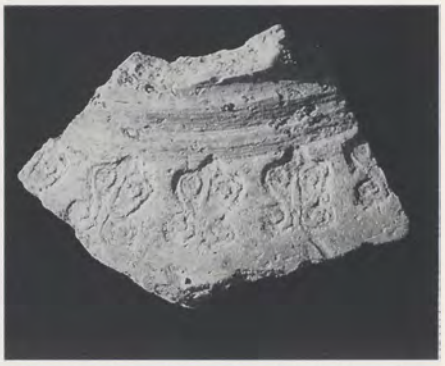

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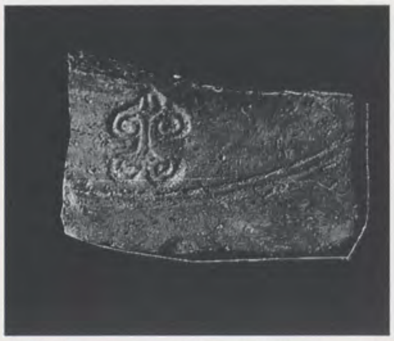

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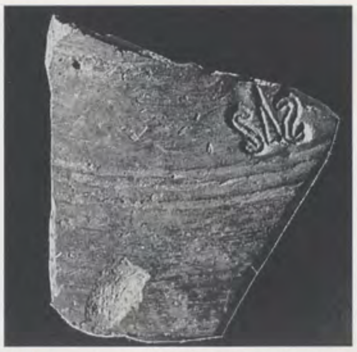

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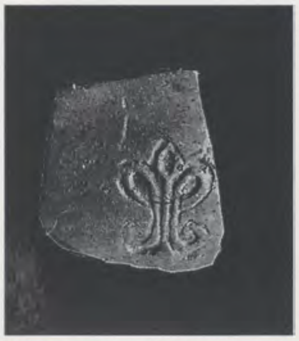

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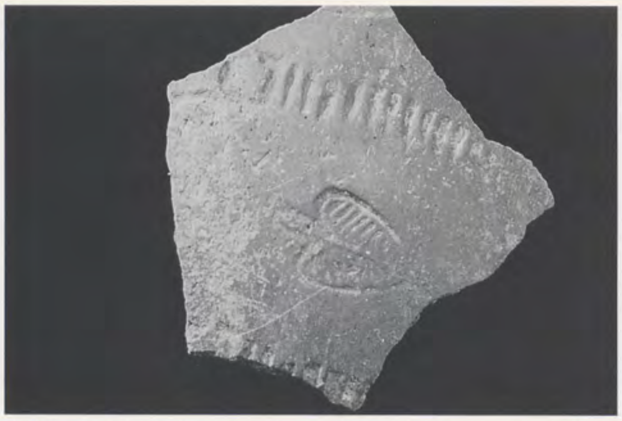
Decorated Pottery, Period V



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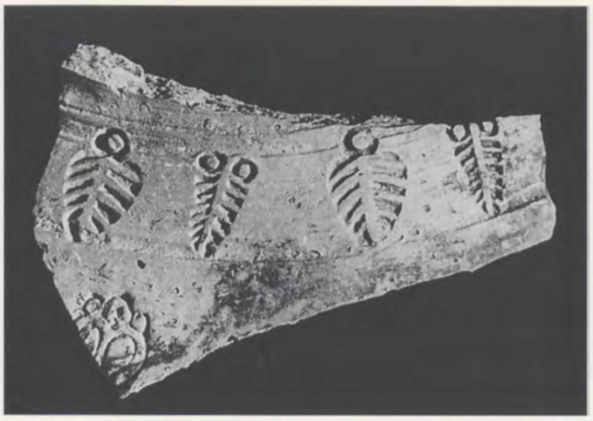

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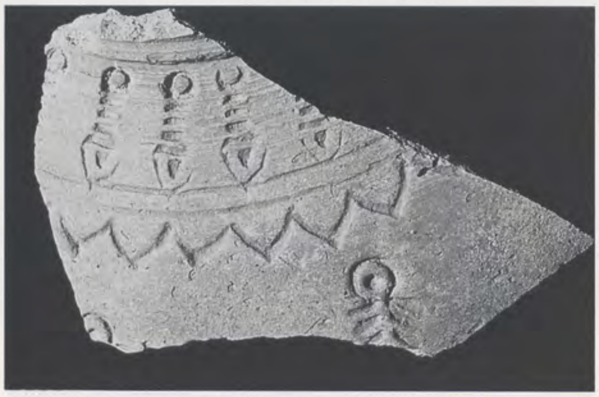

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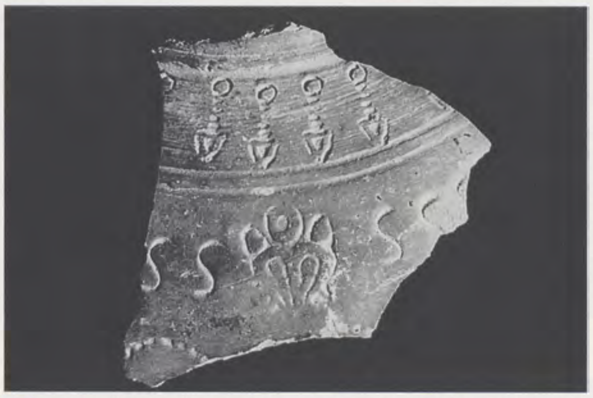

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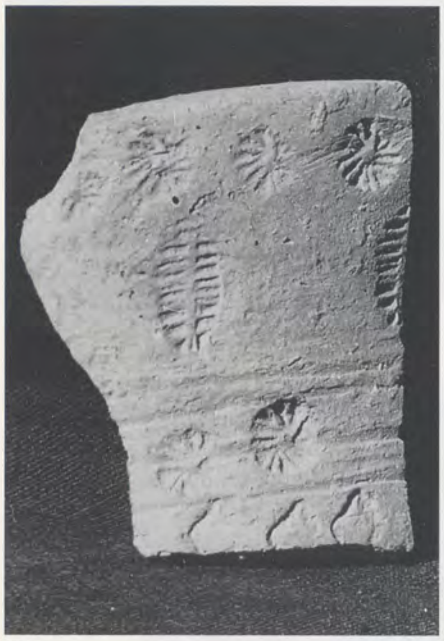

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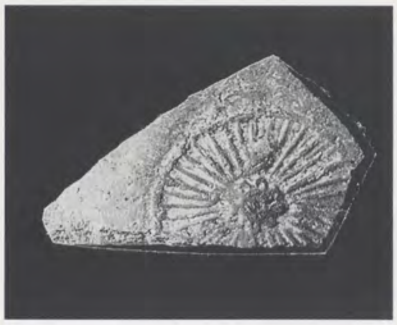

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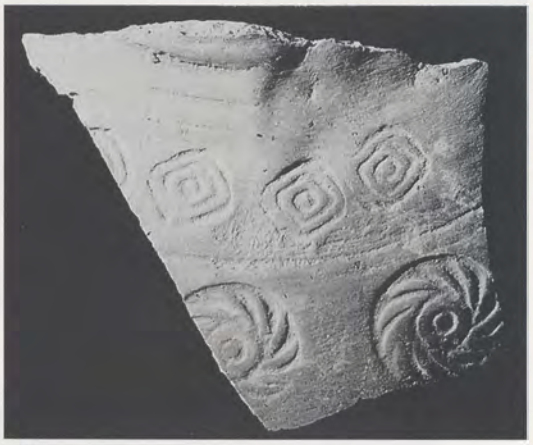

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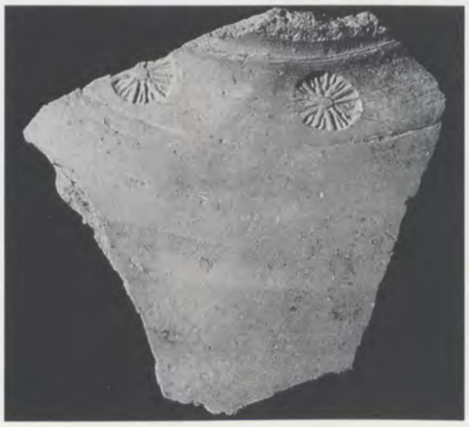

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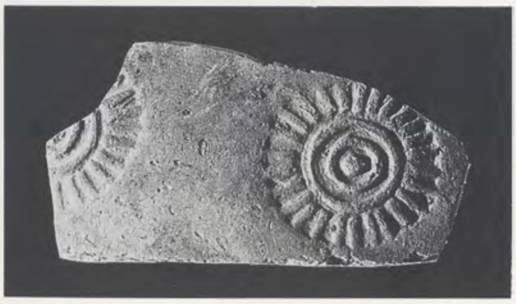

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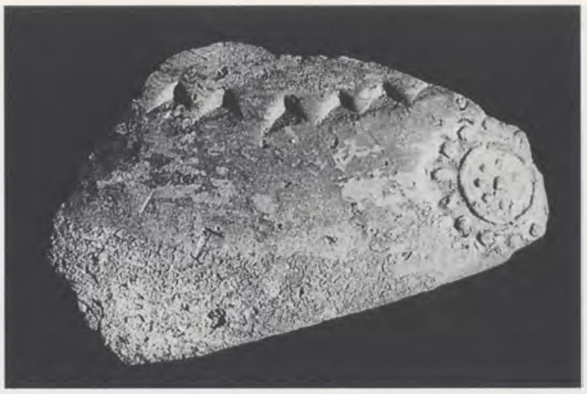
Decorated Pottery, Period V



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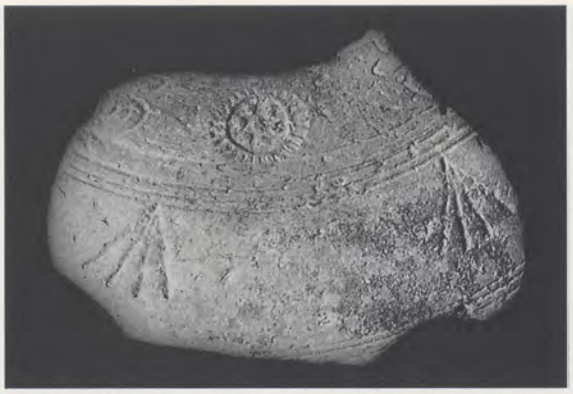

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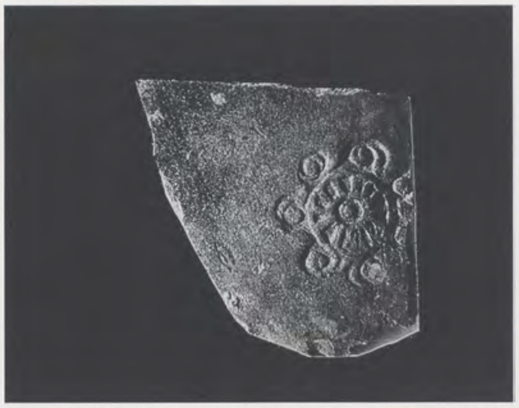

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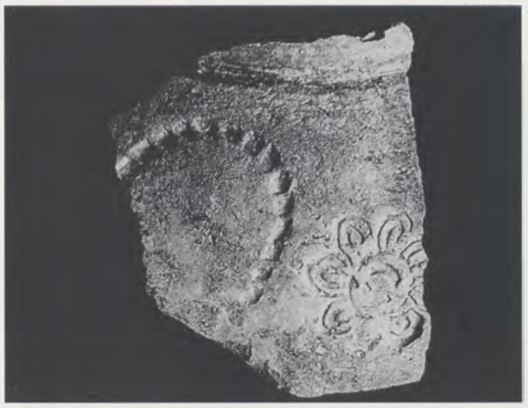

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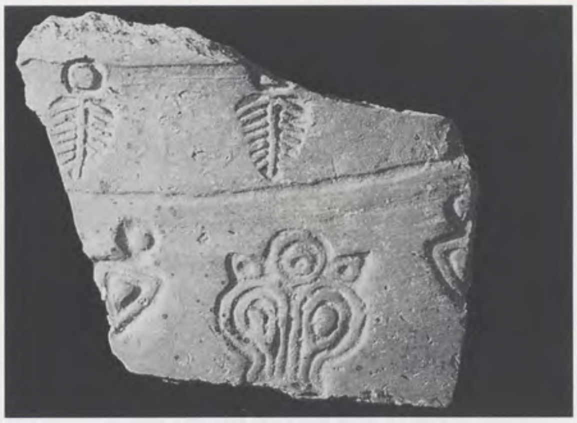

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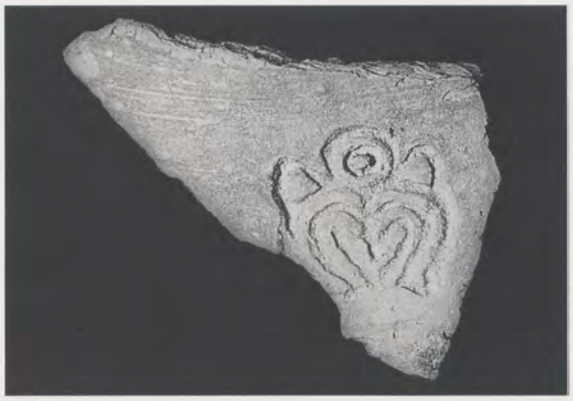

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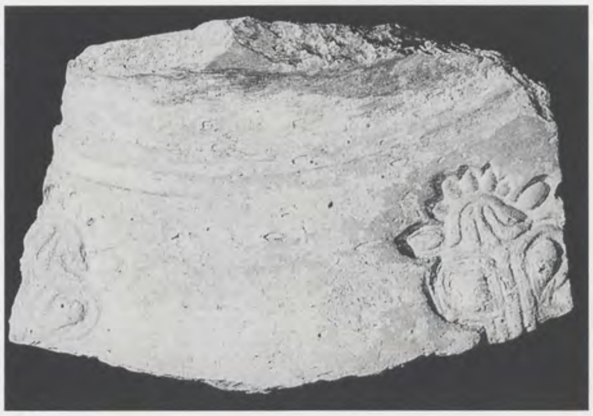

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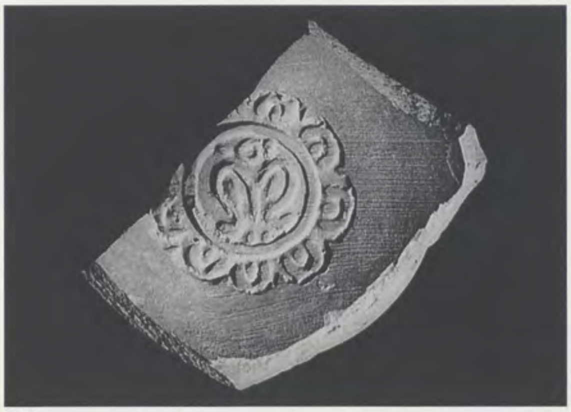

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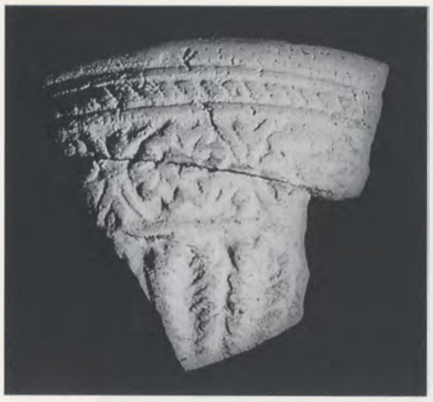
Decorated Pottery, Period V



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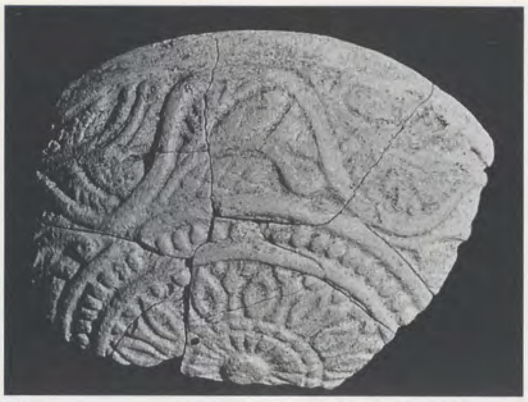

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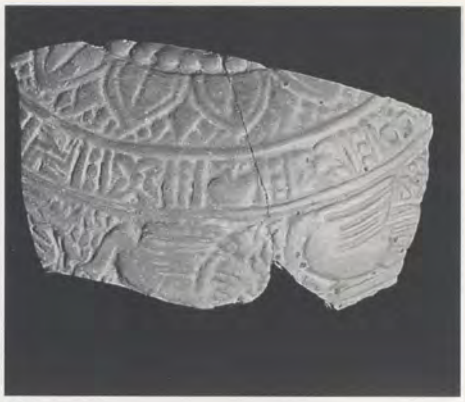

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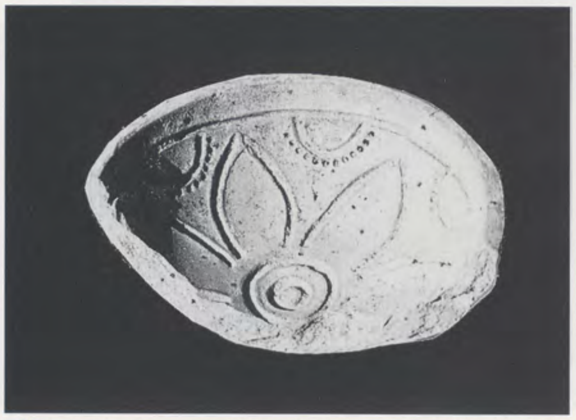

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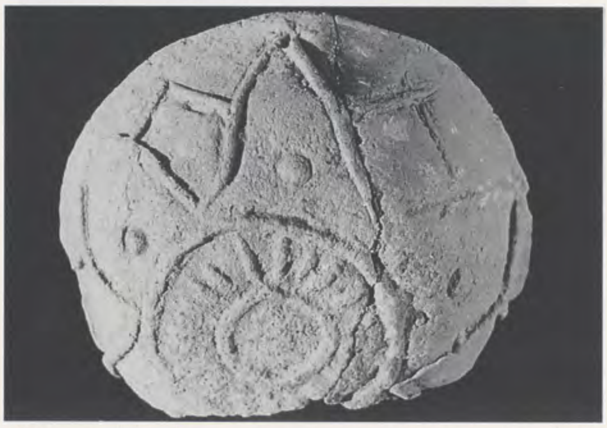

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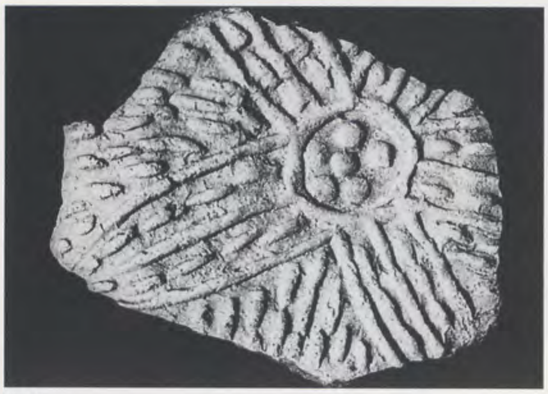

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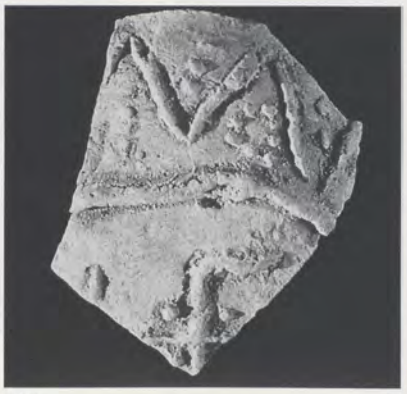

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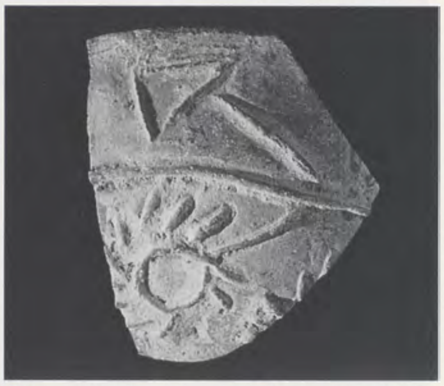

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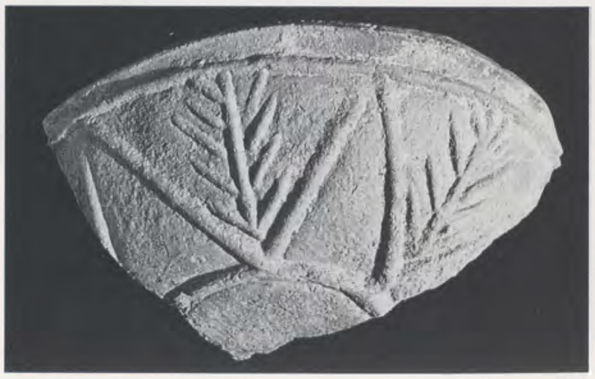

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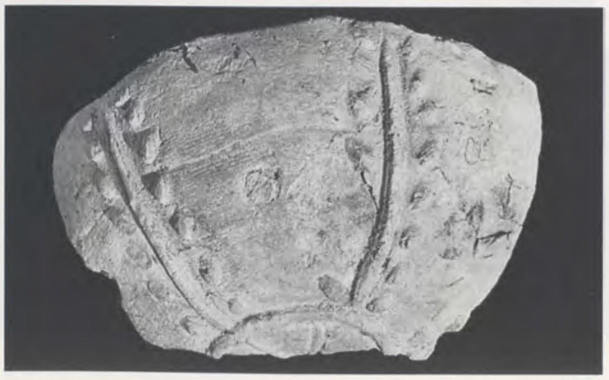
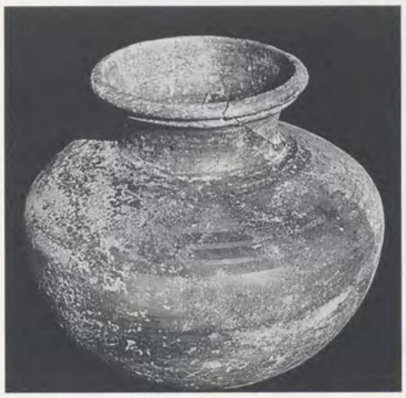


146

Decorated Pottery, Period V



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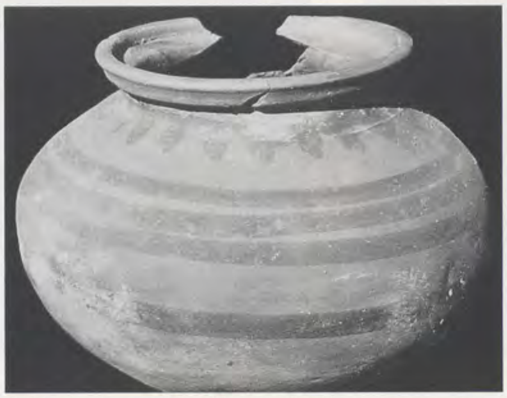

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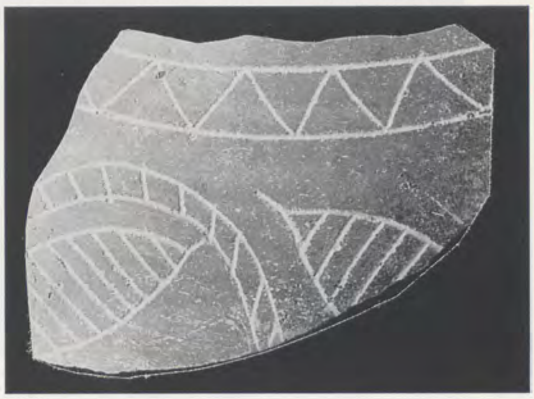

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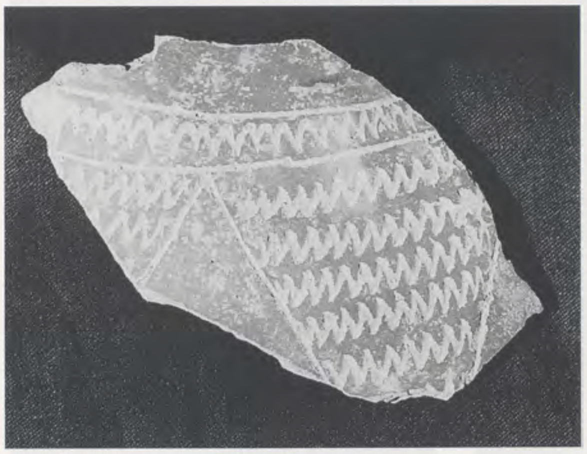

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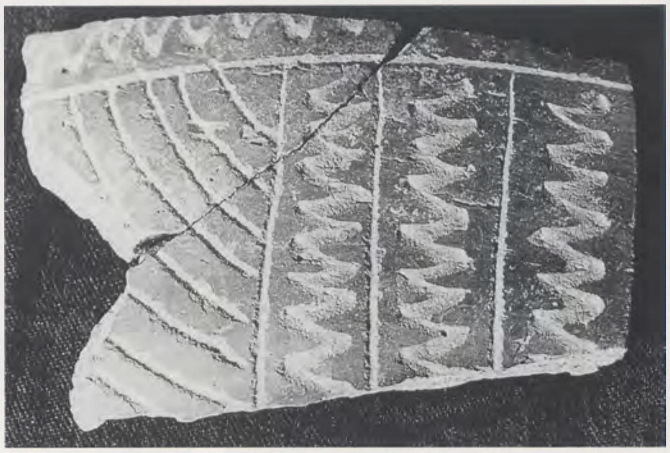

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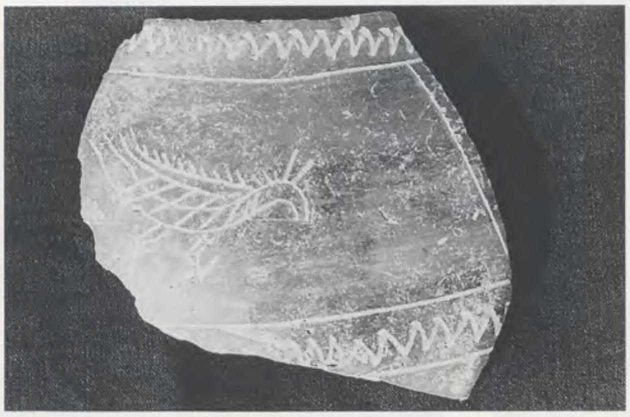

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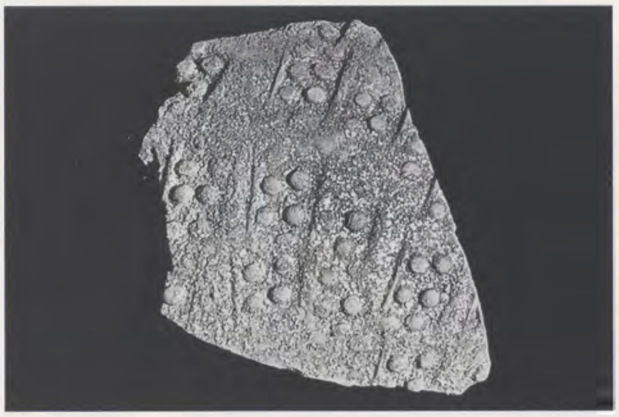
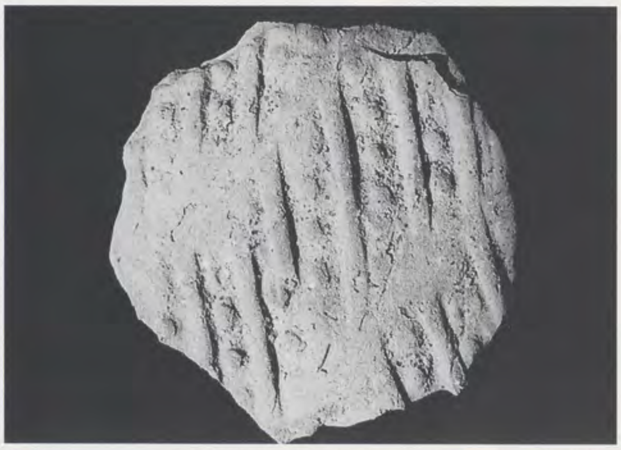


153

Decorated Pottery, Period VI



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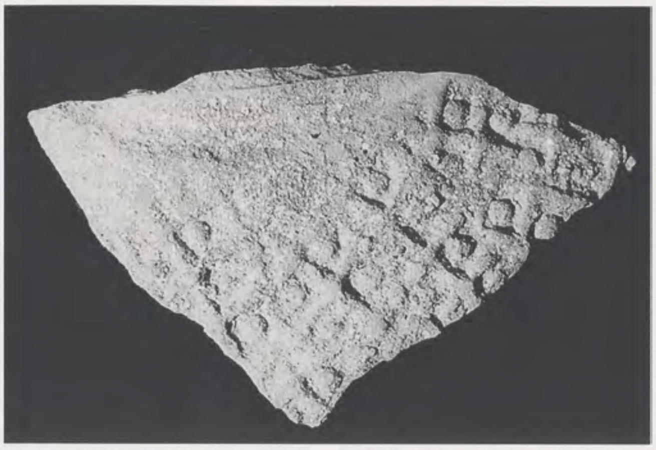
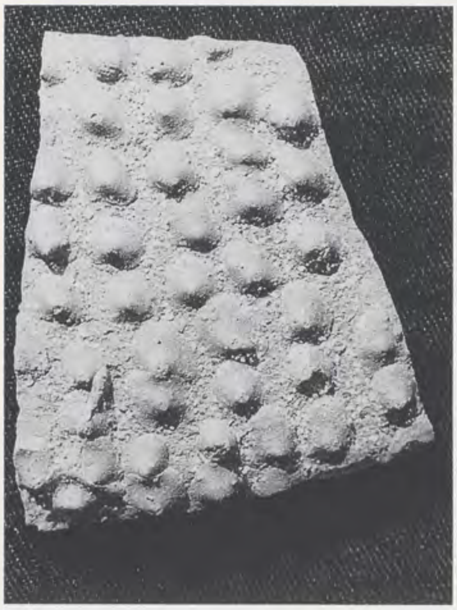


155



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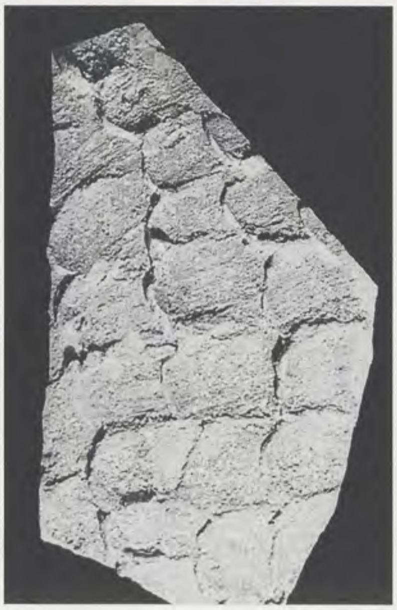

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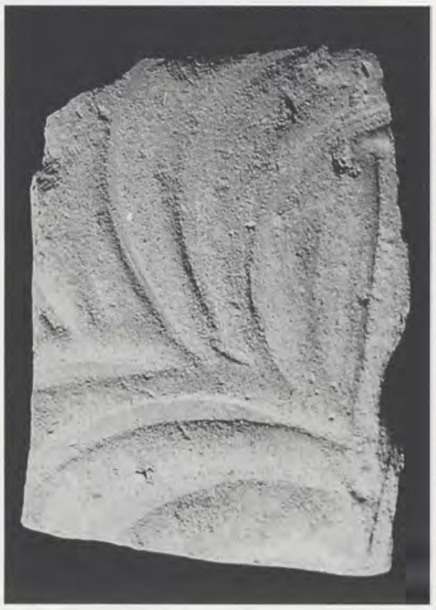

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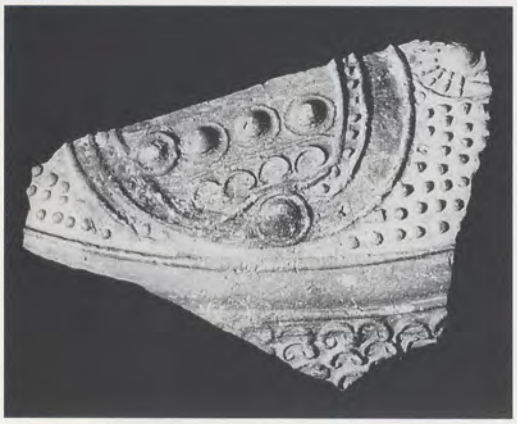

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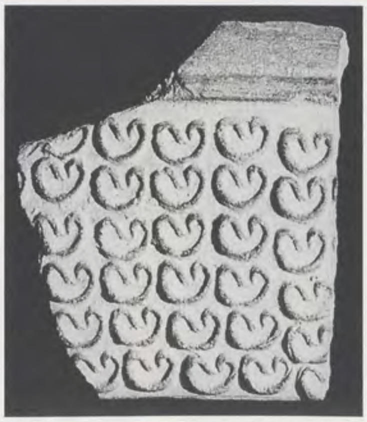

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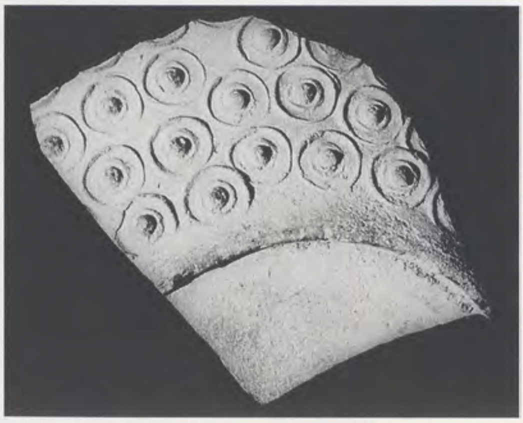

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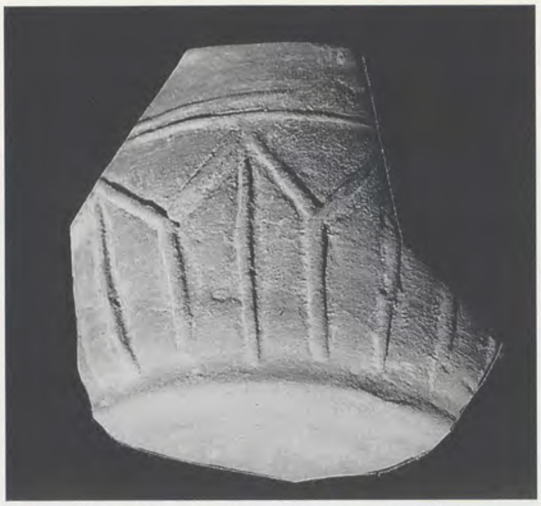
Decorated Pottery, Period VI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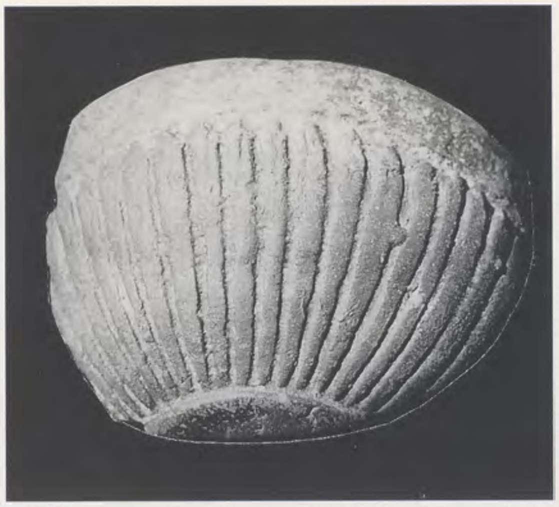
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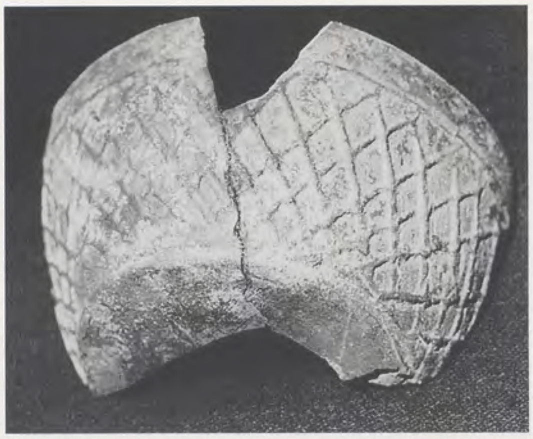
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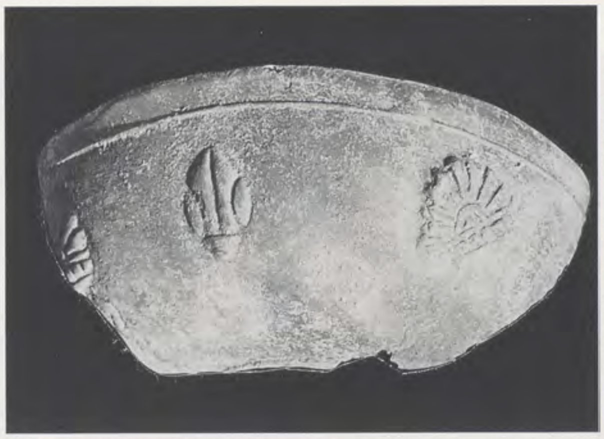
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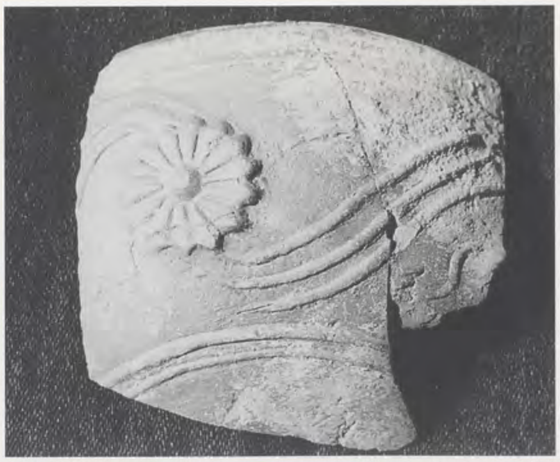
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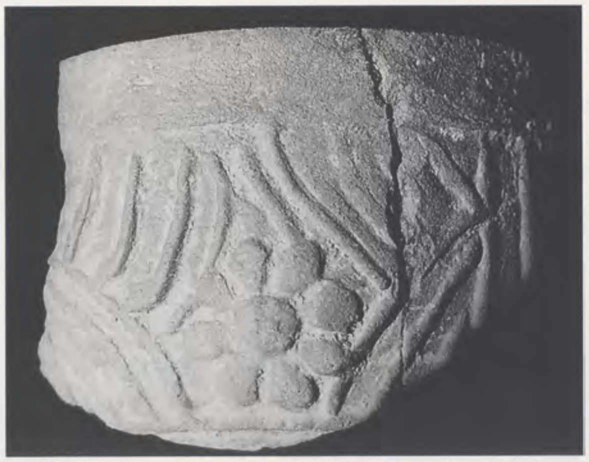
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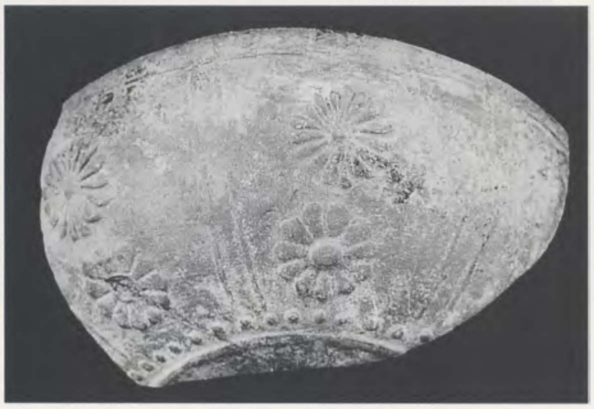
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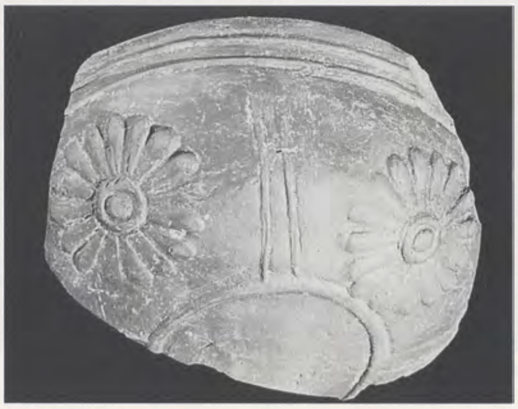
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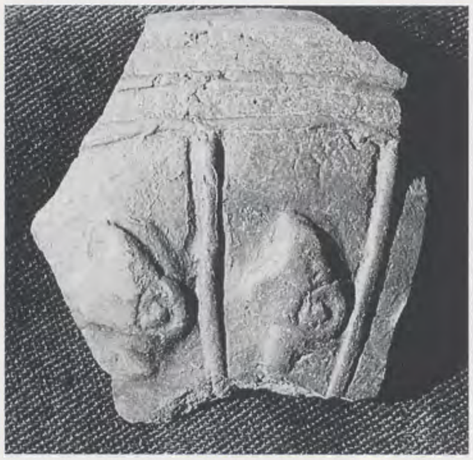
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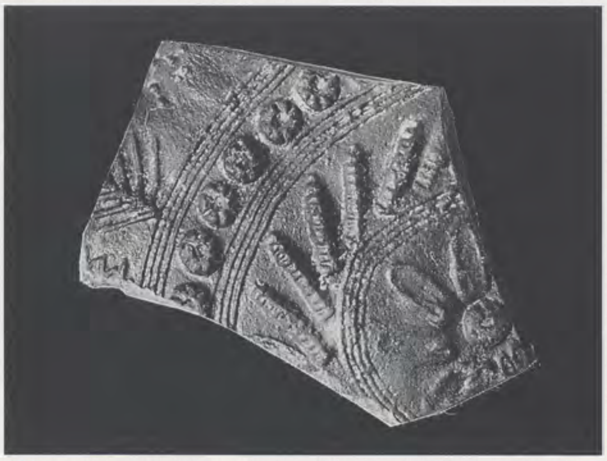
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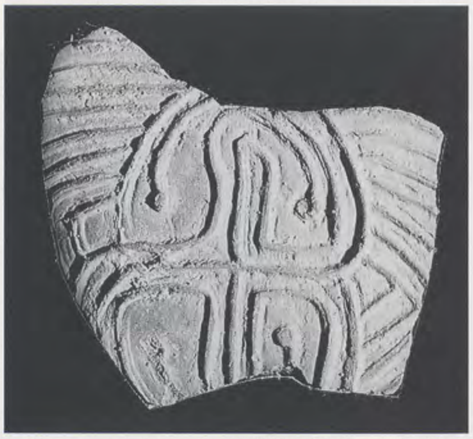
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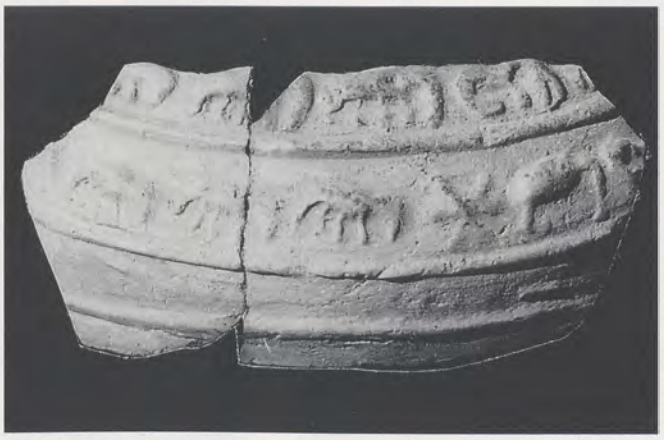
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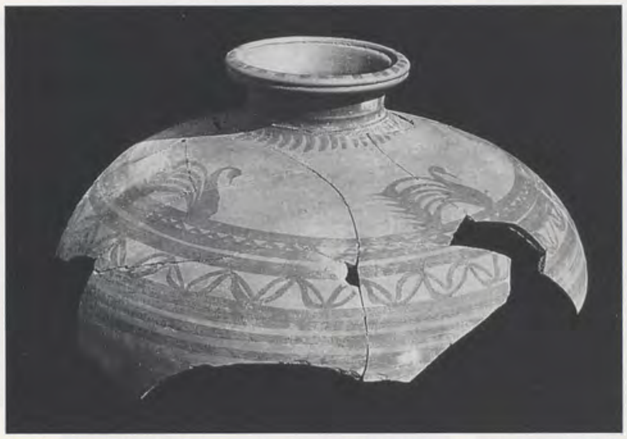
Decorated Pottery, Period VI



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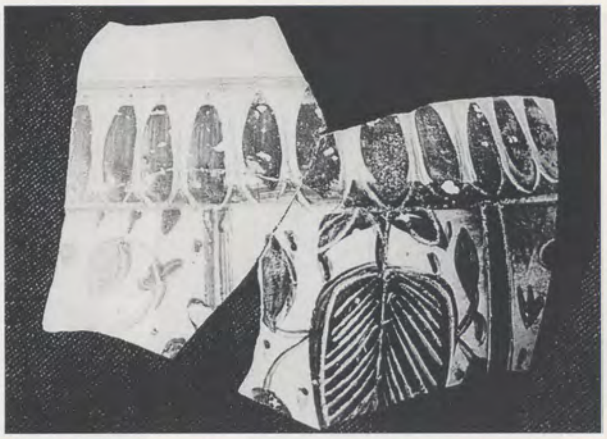

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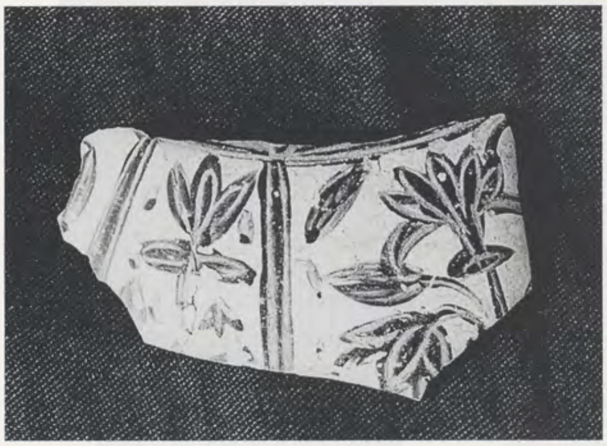

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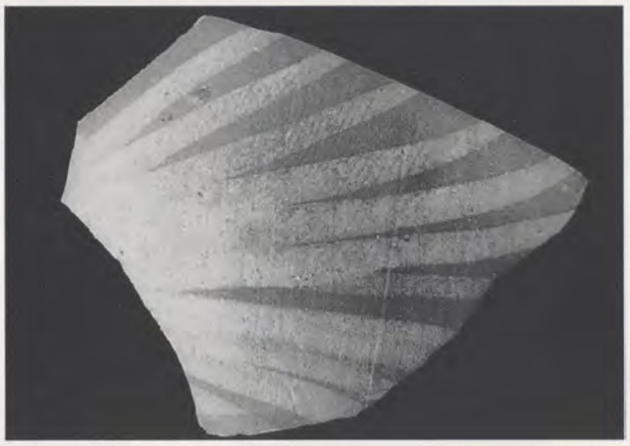

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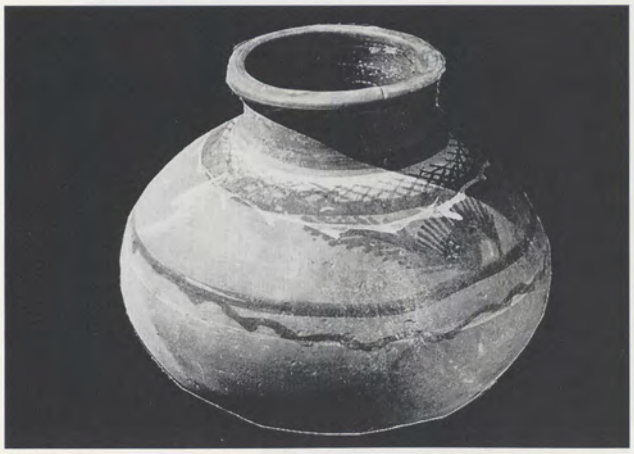

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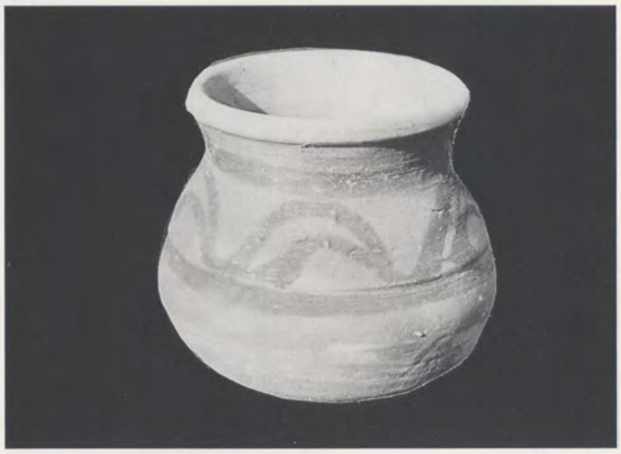

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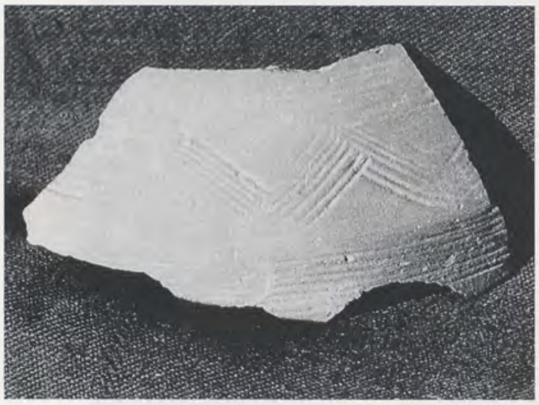
Decorated Pottery, Period VII–VIII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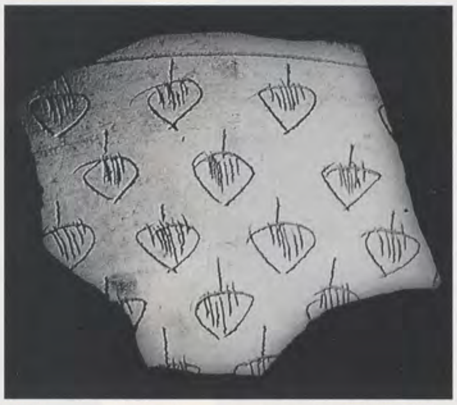
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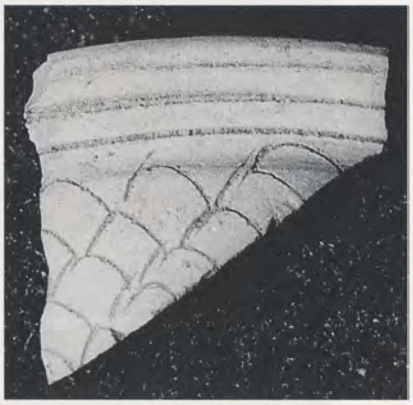
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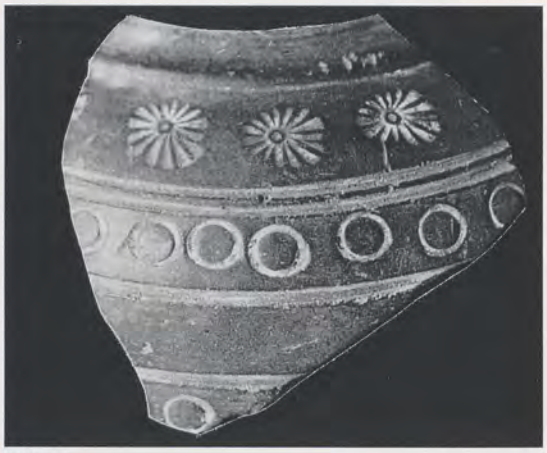
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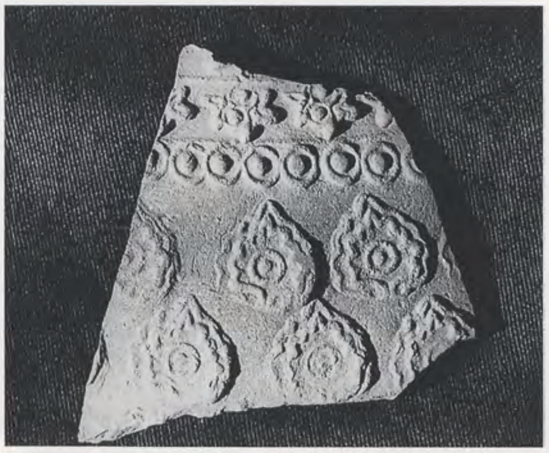
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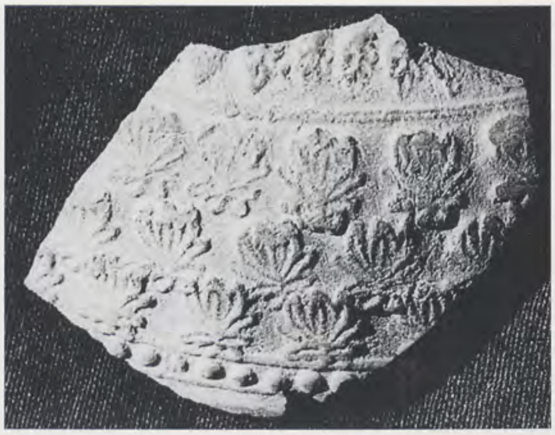
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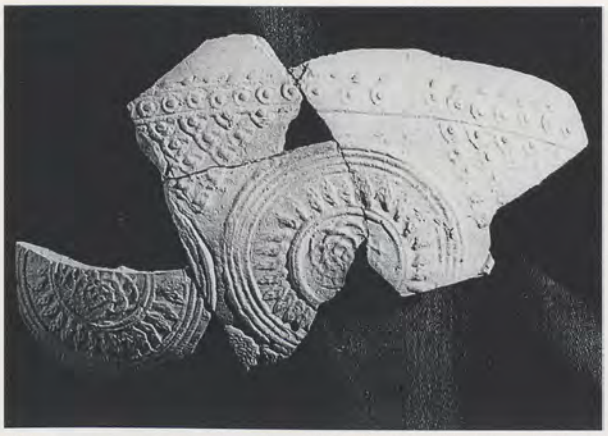
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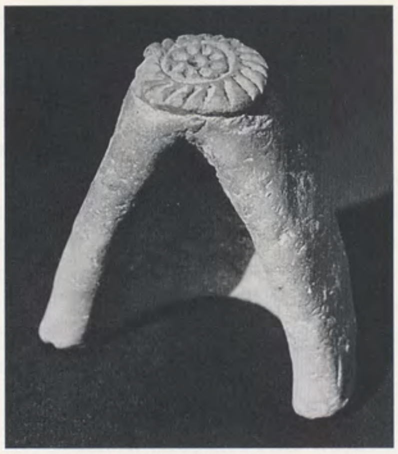
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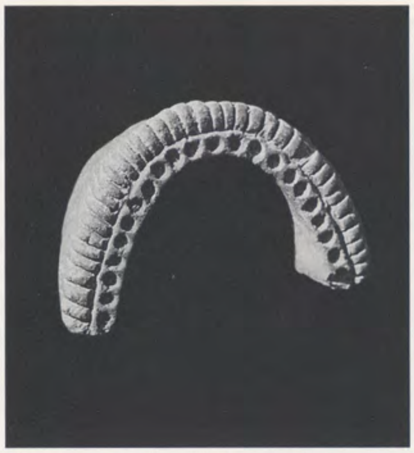
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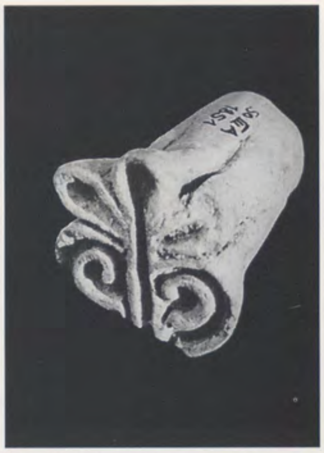
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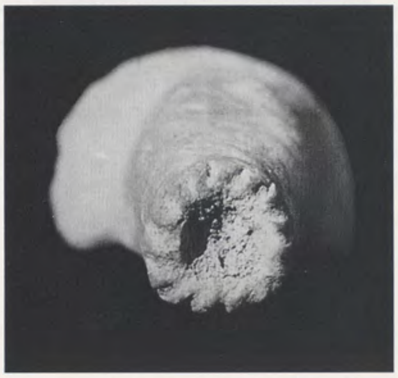
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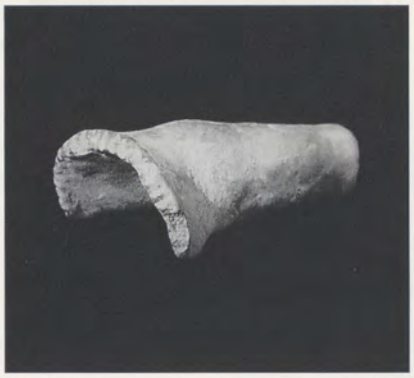
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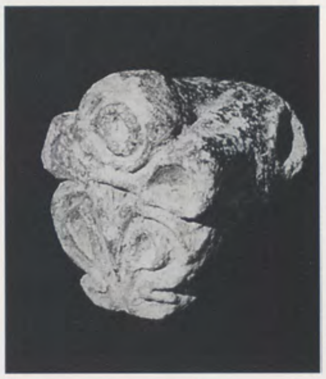
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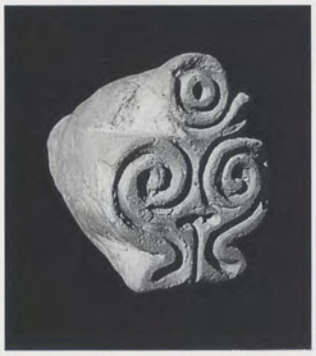
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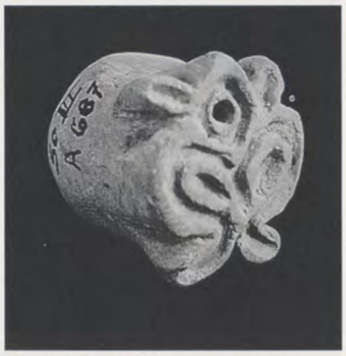

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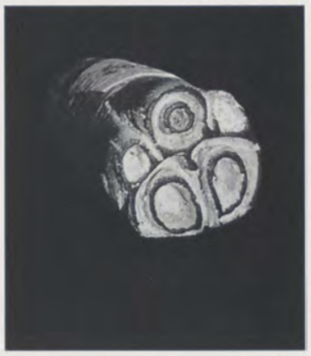
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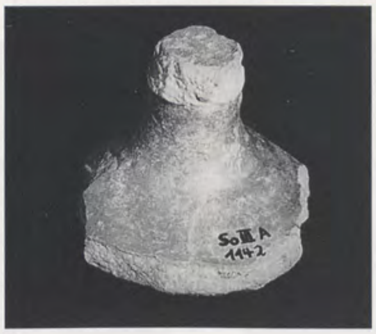
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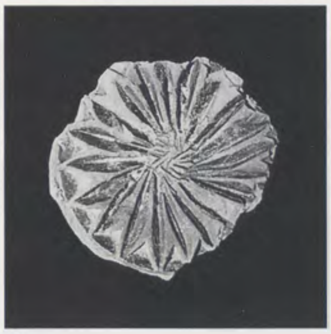
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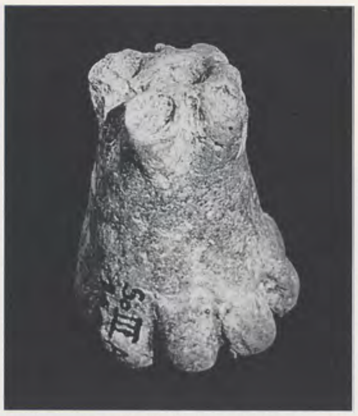
Potter's Stamps, Period V (VI)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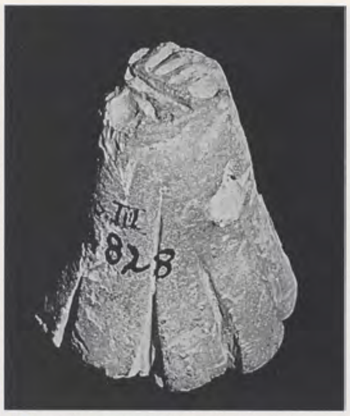
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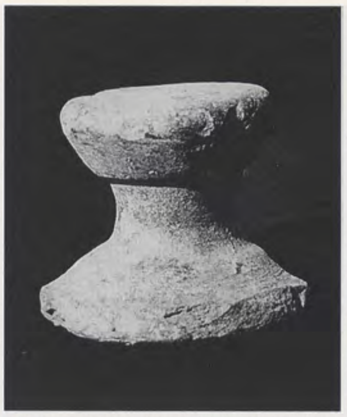
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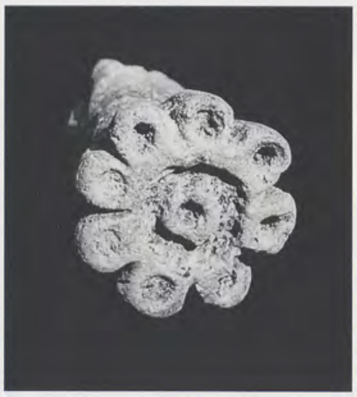
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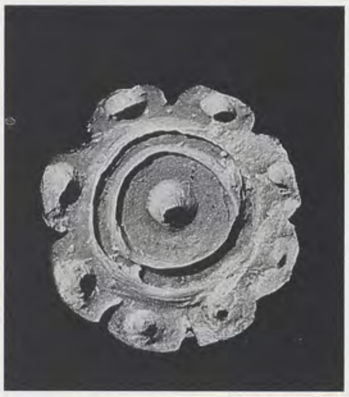
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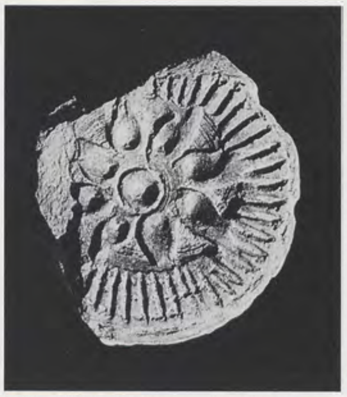
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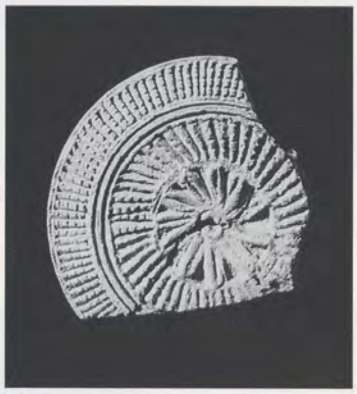
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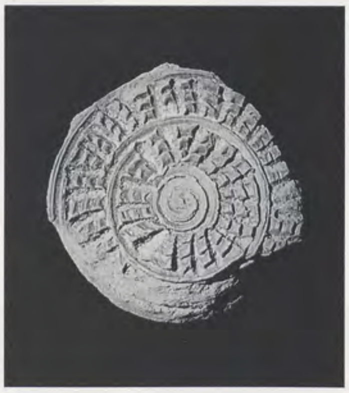
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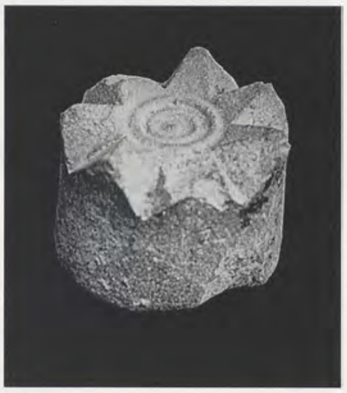
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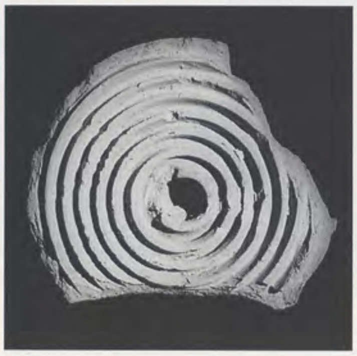
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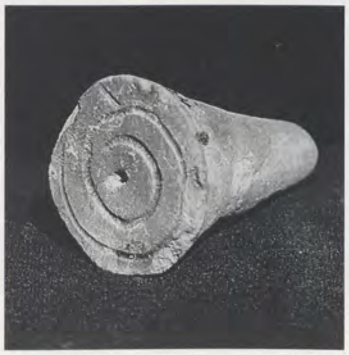
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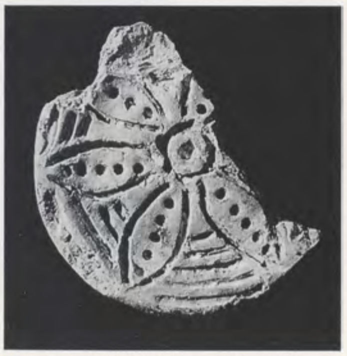
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Potter's Stamps, Period V (VI)

P. POTTERY

Introduction

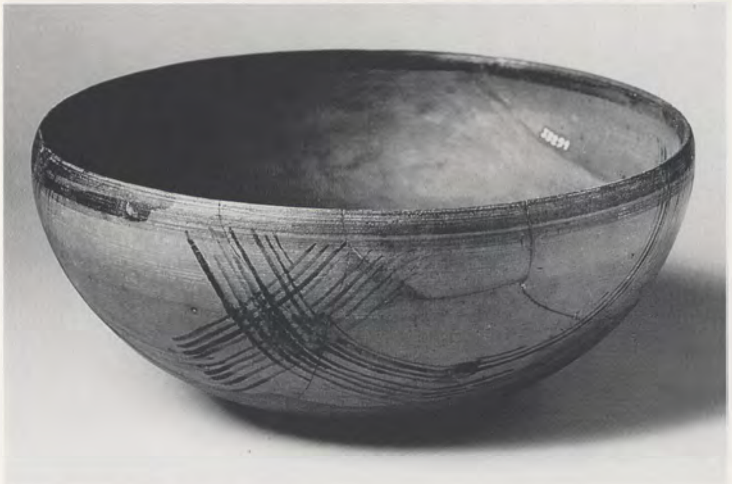
The excavation registers 3120 pots and shape-retaining pottery fragments. The majority of them has been found in their original surroundings and in datable context. This report intends to sum up the main types and shapes of the pottery from Sonkh through all the Periods. A simultaneous study of the material published in the chapter DECORATED POTTERY will be helpful.
The pottery assemblage at Sonkh comprises in the main groups the following wares:

Period I	Painted Grey Ware, Black-and-Red Ware, Associated Grey and Red Wares
Period II	Northern Black Polished Ware, Associated Grey and Red Wares
Period III–VI	Red Wares with increasing modes of decoration
Period VII–VIII	Red and thin Grey Wares with growing Islamic component

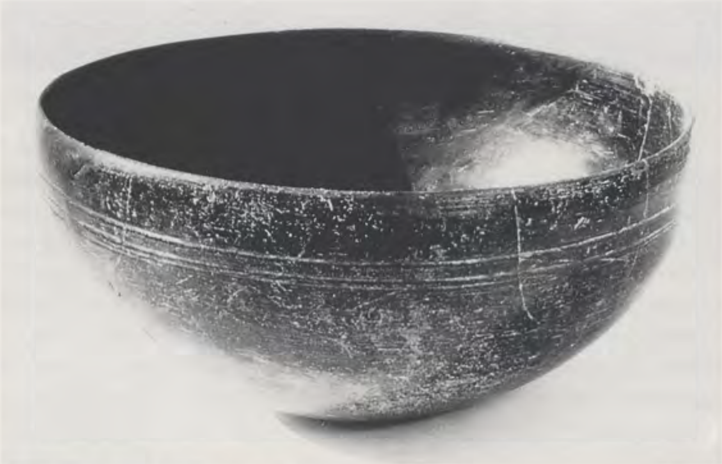
In general the pottery of Sonkh is strongly related to that of other sites between western Rajasthan and central Uttar Pradesh, Punjab and northern Madhya Pradesh, like Rang Mahal, Kaushambi, Hastinapura, Ahicchatra, Atrañjikhera and others.

Period I: The Pottery from the Painted Grey Ware-Levels

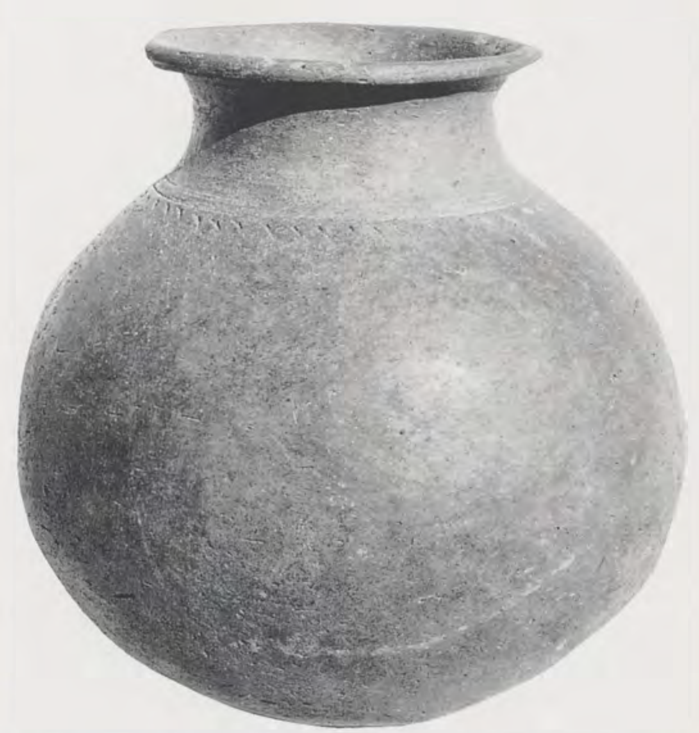
In the area of Sonkh, Painted Grey Ware Pottery (PGW) occurs simultaneously with the Black and Red Ware (BRW), with which it has in common the thin wall and base and the burnished surface. The typical PGW has a grey core of very fine clay texture and is decorated with comb-painted geometric, abstract and symbolic ornaments (see DEC.POT. nos. 1–26), swiftly flung on the outer and inner surface in black or dark grey colour, or even in brownish and greenish shades. With this ware, dishes with convex bottom and carinated or incurved walls are conspicuous (nos. I.1, 2) accompanied by hemispherical bowls (Fig. 81) and cups with steep walls (no. I.33) as the main shapes.
BRW consists, like PGW, of more or less hemispherical bowls (Fig. 82), tulip bowls (no. I.26) and other types of beakers. The Sonkh specimens of this ware carry no ornaments.
Some of the PGW and BRW vessels seem to be made on the potter's wheel, but others are made by moulding the base and building up the wall on a turntable. The wheel-thrown pots have either turned or beaten bases.
Besides the fine grey and painted specimens there occurs a grey ware of cruder fabric and with an increased thickness of the wall. These types are wheel-thrown with roughly beaten or scraped bases. The bowls, dishes, cups and jars of this grey ware are occasionally covered with a black slip. In a few cases the bottom shows, on the inside, stamped rosette ornaments.
Associated with the rather delicate PGW and BRW potteries are storage jars (no. I.40), water jars (Fig. 83), bowls, jarlets and cauldrons of less refined clay and texture, of brick-red colour, either wheel-thrown or, definitely in the case of the storage jars, coiled and beaten, sometimes even showing ribbed paddle-marks. The water jars of this period are, in general, globular with concave necks and out-curving rims, in a few cases stamped with a taurine symbol or separate circle and semicircle, inside the rim (no. I.53). Some vessels of the associated ware are embellished with incised or impressed lines, or band, or with applied cordons.



81 Painted Grey Ware bowl



82 Black-and-Red Ware bowl



83 Red ware jar of PGW Period

Period II: The Northern Black Polished Ware and the Mauryan Red Wares

The PGW, BRW and its contemporary associated wares were, to our knowledge, the earliest pottery products of the Mathura region. With the next phase the Mauryan period opens and with it, the traditions of PGW and BRW terminate. The Coarse Grey Ware seems to become more frequent; the fashion of black-slipping increases in such a way that even grey terracotta figurines get slipped.

Beginning with the Maurya period, the Northern Black Polished Ware (NBPW) makes its appearance. At Sonkh, quite a number of mostly very small sherds have been found. From rims, the shape of the vessels can at least be partially reconstructed. All available sherds belong to shallow bowls and dishes, most of them rather large, with flat or convex bottom and angular, nearly straight, inclined wall and plain rim, which obviously retain elements of PGW. The paste is of very fine fabric and of grey, buff or reddish colour. A typical feature is the thin light red or pink layer beneath the coating. The coating itself is black, dark steel-blue, or dark brown. It is lustrous and iridescent. Considering the extreme thinness of the sherds in relation to the size of the dishes one can rightfully call this ware the luxury porcelain of the Mauryas.

On the whole, red ware becomes more dominant during the 4th and 3rd centuries BC. Storage jars are of the same manufacture and they retain the previous shapes. Pyriform or gourdshaped water jars appear along with globular ones. The typical pyriform jar has a rather wide carinated neck (no. II.23;Fig. 84). Cooking vessels with lenticular base, bulging or carinated wall and angular everted rim appear in early Mauryan times. The bottom of these vessels contains mica in minute particles, obviously in order to make the vessels fireproof. In one case, a taurine symbol is impressed on the exterior of a cooking bowl. Slurry-daubing seems to appear for the first time.

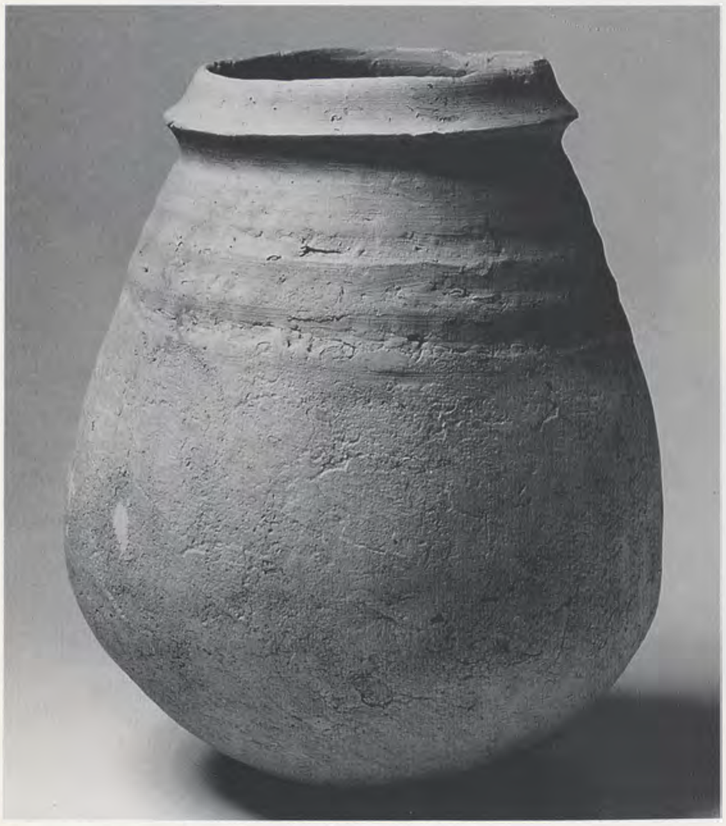
Some rather peculiar types of small bowls or dishes are worth mentioning here. They have inward beaded or bevelled rims and they can be grey, black-slipped grey, or red. Another type of the 3rd century BC is a carinated dish with slightly convex base and everted or flaring rim, the base containing mica (no. II.71). This type can be traced up to the 2nd century AD. Globular ointment jarlets continue from PGW times, in red ware. A rather large lid in the shape of a curved dish with central loop-handle belongs here also (no. II.89).

Two objects found in the Mauryan levels at Sonkh may point to the existence of animal-shaped and figuratively adorned vessels in the 3rd century BC. A rather peculiar-looking object, for instance, is the fragment of a tortoise-shaped vessel (no. II.62). It is of red clay, the trunk seems to be wheel-thrown with presumably six leg or neck-appendages. The surface is red-slipped and decorated with incised grooves. It may have been used as a lamp. A small female terracotta head of brown colour originates from late Mauryan times (HUMAN TERR. FIG. no. 15). At the point of fracture throwing marks are visible. The head had presumably been attached to the neck and shoulder of a pot, comparable to a complete vessel in the reserve collection of the Mathura Museum.

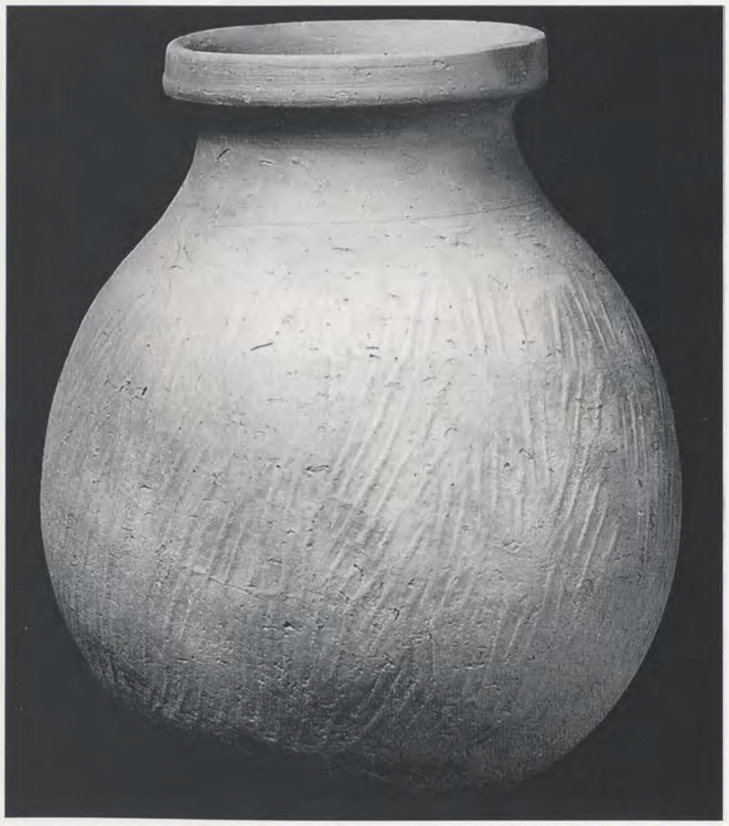
The Pottery of the Śuṅga Cultural Phase

In the 2nd century BC the style of the pottery did not undergo sudden changes. As for storage jars, there is hardly any evidence of their shape. A single fragment of a rim suggests the continuation of the old types. Many of the pyriform water jars, which already appeared in Maurya times, are now decorated with ribbed paddle-marks (no. II.92; Fig. 85).

Cooking vessels with carinated wall become dominant (no. II.87). Worth mentioning are small thick-walled jars with or without criss-cross pattern on their shoulder and perforations in the neck (no. II.86). Another typical sample is the "jar-cum-bowl", that



84 Red ware pyriform jar, Period II



85 Pyriform jar with paddle-marks, Period II

means the lid is in the shape of a small jar or beaker with a slanting flange (no. II.88). In the same levels one again finds the slightly concave lid with central loop-handle.

The NBP Ware terminates; the black-slipped Grey Ware survives in the form of bowls with in-beaded rims, or large bowls with faceted rims, also jars with funnel neck (no. II.79). But the shallow grey bowl with convex bottom and nearly straight wall is replaced by the funnel-bowl with narrow untreated flat base and upcurved or inflected, later on also carinated, rim of red ware (no. II.42 ff.). This type of bowl appears in ever increasing quantity up to the Kuṣāṇa age and later. Its frequency as the typical food bowl causes one to call it "common bowl".

A great variety of small vases and jars with flat bases develops. Jars with bow-rims are peculiar to this period (no. II.98). A small globular ewer with flat base and narrow neck, unfortunately having the rim missing, is the oldest spouted vessel so far known in this region (no. II.59).

Period III: The Pottery in the Time of the Mitras of Mathura

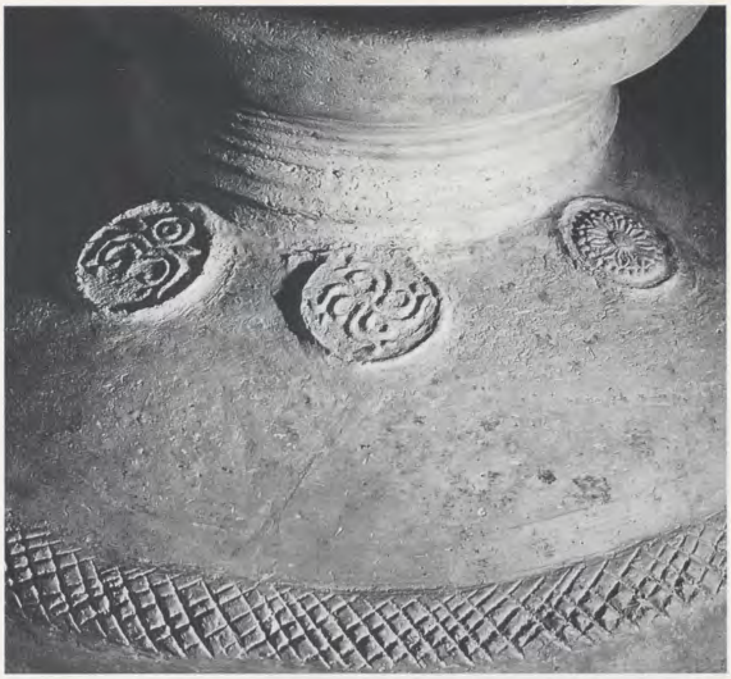
With Gomitra, the period of the Mathura rulers with -mitra ending names begins. In their time, that is from the end of the 2nd century to the second half of the 1st century BC, many pottery types continue: as for instance the oblong storage jar without decoration, the pyriform jar with or without paddle-marks, the common bowl, the jar-shaped lid and the carinated cooking vessel. Others, like the jar with bow-rim, the cooking vessel without carination, the slightly concave lid with central loop-handle, and above all, the Coarse Grey and black-slipped Grey Wares *do not survive*.

New are a storage jar, elliptical in section (no. III.17), a big oblong but neckless jar with crudely incised vertical strokes (no. III.18) and ovoidal storage jars with appliqué cordons and symbols (svastika, nandyāvarta and lotus rosette) (no. III.16; Fig. 86). Simpler forms of the taurine, nandyāvarta and svastika symbols occur on a number of sherds from the Mitra levels at Sonkh (see Dec.Pot., nos. 46–49). In this connection a water jar with incised svastika and nandyāvarta (no. III.5) is to be mentioned. The pyriform jar now often shows a gently upward curving long neck (no. III.11). New are also a bottle with an apple-shaped trunk and a slender deeply profiled double-carinated neck (no. III.59), and a bottle with a hemispherical trunk, a conical shoulder and a corrugated neck (no. III.58; Fig. 87). A small waisted jar with flat or convex bottom and funnel-rim is noticeable (no. III.71). Furthermore there are the barrel-jar with grooves (no. III.19), the bowl or dish with "eared" loop-handles (no. III.39), another one with "eared" spout, and a small cup-shaped libation vessel with long spout (no. III.110).

Two fragments of a bowl and a jar deserve special attention because of their peculiar spouts, which are chevron-shaped and pointing downwards (nos. III.69; 99). The bowl seems to have been standing on legs or stilts. Another interesting pottery item of this Period III is a fragment of a vessel showing a handle in the shape of a monkey with upturned tail (see Misc.Terr.Obj., no. 6).

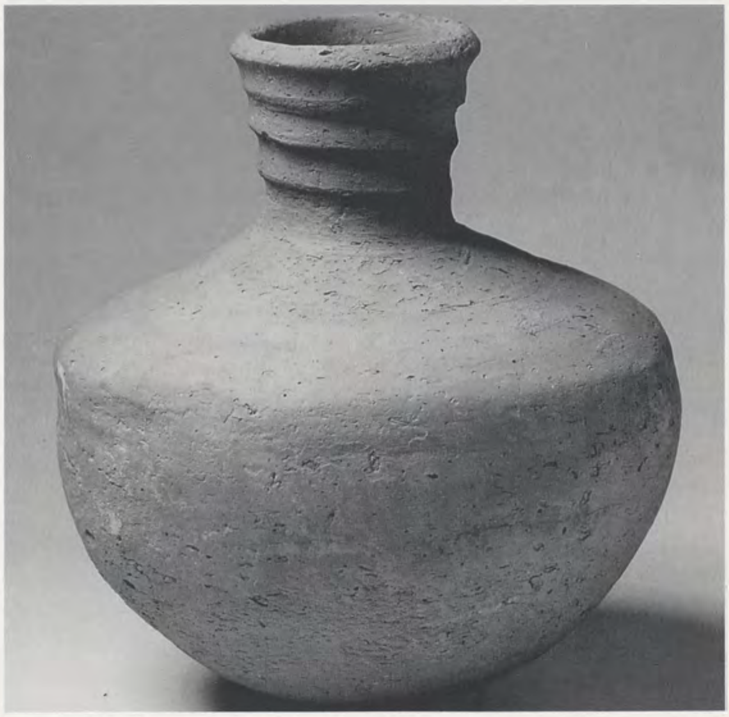
Period IV: The Pottery in the Time of the Dattas and Kṣatrapas of Mathura

The time from the last quarter of the first century BC to the middle of the first century AD is characterized by definite stylistic differences in the pottery products from the foregoing period. Storage jars develop the shape of the Mitra vessels or are of a new type, the distinctive features being a short neck and beaded, sometimes even undercut, rim (no. IV.25). Conspicuous are globular water jars and ewers with corrugated necks or rims (no. IV.5). In this period, or more precisely in the latest phase of Kṣatrapa structures at Sonkh, the fashion of *stamping* the vessels with a rosette, nandyāvarta or other designs begins.

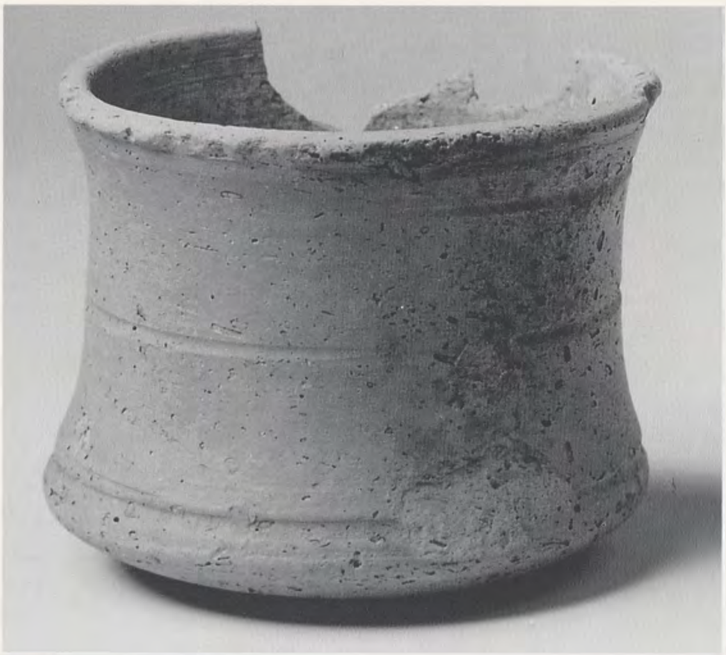


86 Storage jar with appliqué cordons and symbols, Period III

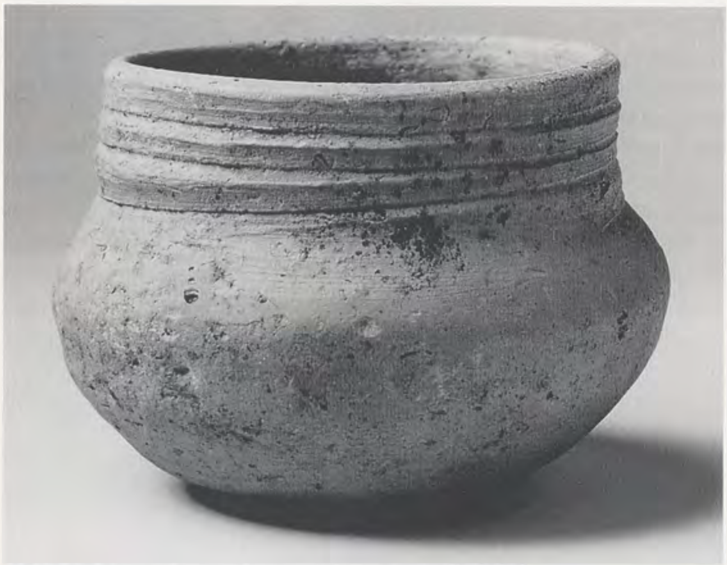
Among the small vessels, a bell-shaped cup with clearly protruding foot (no. IV.42) shows affinities with Central Asian and Bactrian goblets in clay of metal of the same era. It is comparable also to a Kṣatrapa metal goblet from Level 23 at Sonkh (see chapter METAL, no. 58). Other new shapes are a capstan-shaped cup with saggar base (no. IV.38; Fig. 88), a beaker with bulging wall and grooved vertical rim (no. IV.41; Fig. 89), a small double-carinated jar appearing in great quantity (no. IV.17), a bowl lid with



87 Bottle with corrugated neck, Period III



88 Cup with saggar base, Period IV



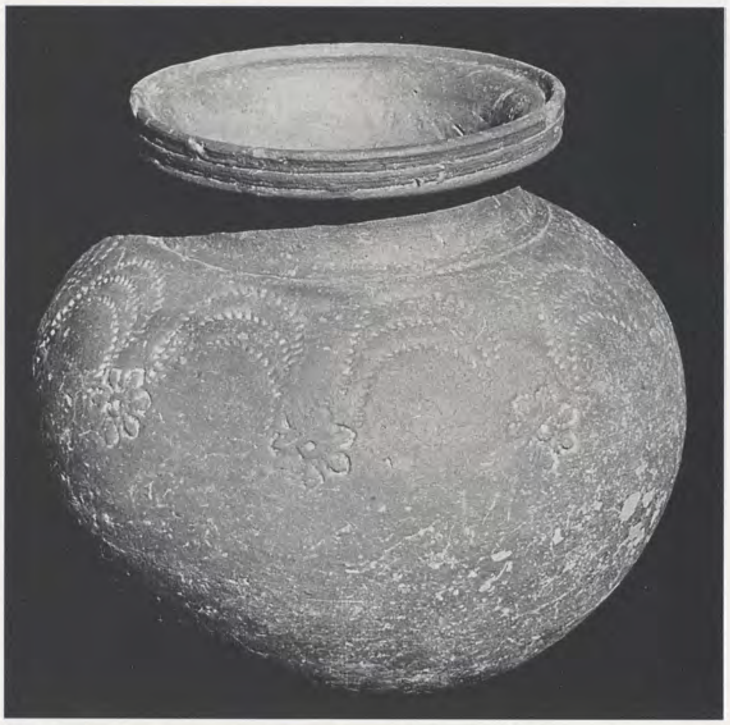
89 Beaker with grooved vertical rim, Period IV

central grip-hole (no. IV.53), and an elegant globular bottle with a slightly bulbous long neck and smooth red slip (no. IV.1). The small spouted libation vessel turns up again, but this time with double-spout and fish-tail handle (no. IV.59).

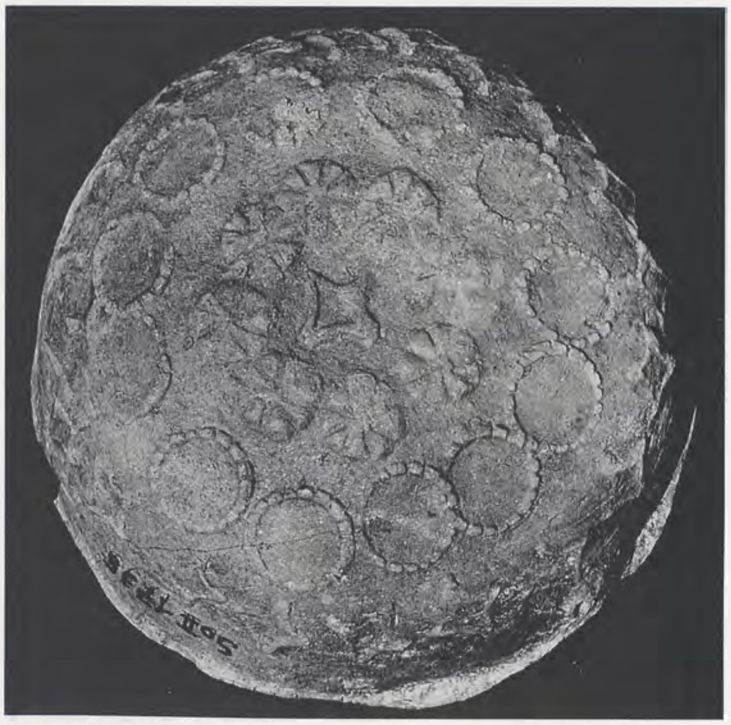
Period V: The Pottery of the Kuṣāṇa Era

In the Kuṣāṇa era a number of shapes of the preceding levels show further development and in addition, quite a number of new types appear. The most characteristic feature of the pottery in this period is the abundant *stamping* of storage vessels, jars and ewers with symbolic, floral or geometric ornaments (Fig. 90). Many different forms such as śrīvatsa, nandyāvarta, cakra, svastika, haṃsa, rosette, leaf, circle and combinations of them turn up as decorative patterns (see chapter Decorated Pottery). Besides the stamped designs the first ornamentally moulded small bowls (nos. V.82 ff.), jars or ewers have been found. They are met with in the middle Kuṣāṇa levels, the specimens being rather crudely executed, showing lotus and other ornaments on the exterior of bowls (Fig. 91), but in time, the ornaments rise to a high standard of craftsmanship, culmination in vessels from the end of the Kuṣāṇa to the Gupta period (see Dec. Pot., no. 139).

The globular water jars with corrugated rim or neck are now very often spouted (no. V.20), the spout sometimes being shaped as a makara's or a horse's, bull's or bird's head. The smooth ovoidal bottles with long neck continue, and additionally there appear bottles with the sprinkler neck, well known from other parts of



90 Storage jar, stamped with floral ornaments. Period V



91 Small moulded bowl with ornaments on the exterior. Period V

northern, central and western India (no. V.1). Rather outside the usual style or styles of the Kuṣāṇa potteries from Sonkh is a saddle-shouldered, narrow-necked ewer with a steep and long tapering spout, a flaring rim and a loop-handle (no. V.6).

Although there are still bowl-lids with central grip-hole, the majority are now bowl-lids with central knob and a distinct flange (no. V.87 ff.).

Period VI: The Pottery of the Gupta and Post-Gupta Levels

These levels show a ware with characteristics rather distinguished from that of earlier levels, as it is much more delicately thrown, has a smooth, mostly red slipped surface very often painted with distinct black horizontal stripes (nos. VI.8 ff.; Fig. 92) arranged in bands of three or two stripes, later on replaced by painted swans and floral ornaments (no. VI.30). The necks of the jars are sometimes double-rimmed (nos. VI.15 f.) or deeply channelled. Some of the jars have spouts with pointed crops. The shapes of the trunks vary from heart-shape to oblate globular, several with saddle-shoulder. The latter can be decorated with raised dots and ridges, partially coated with mica or gold-coloured slip. The body is of medium chaff-tempered fabric, with grey-black core.

There are also bowls with bulging walls and flaring rims. Small moulded bowls with relief ornaments continue, but now they are much more refined. A goblet with moulded bowl and stem is remarkable (no. VI.78; Fig. 93). Some of the bottles with bulging trunk have sprinkler necks and spouts. The cooking vessels don't differ so much in shape from those of earlier levels. The funnel-bowls are now mostly with plain straight rim instead of stepped in-curved or carinated ones. Besides bowl-lids with central knob, bell-shaped lids with grooved or painted decoration turn up. A special feature of this period are the elaborately made pedestal lamps with loop-handle and scalloped rim.

Periods VII/VIII: The Pottery of the Medieval and Islamic Levels

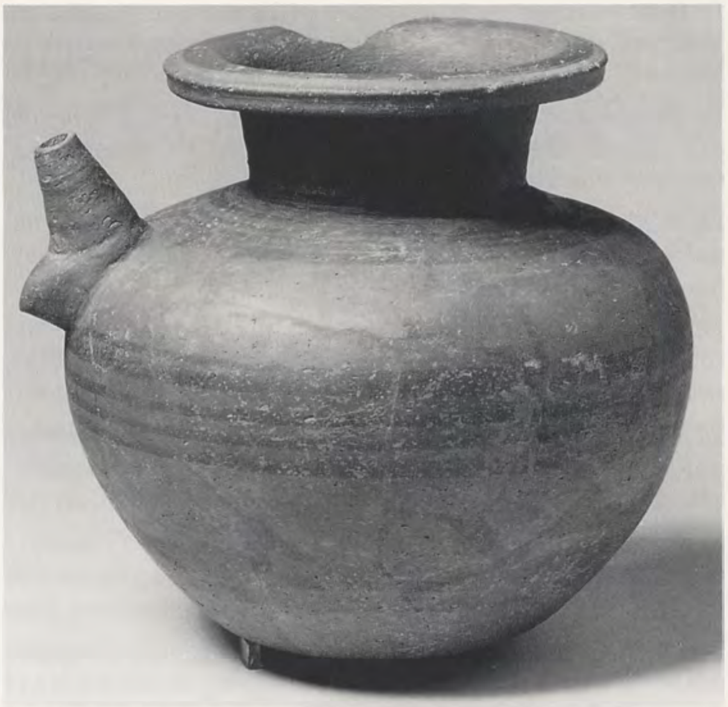
Above Level 12 the quantity of pottery finds is considerably reduced. The Levels 11 to 9 show vessel types similar to the Gupta & Post-Gupta ware, though the more refined pottery of the early Gupta period has disappeared. A new type of lid, the cone lid with knob (no. VII.34), gradually replaces the bell-shaped and the bowl-lid. Decoration mainly consists of black painted stripes, swans and peacocks, arches and festoons. This fashion continues, but in Levels 8 to 6 partially moulded jars and bottles with rich relief decoration in Islamic style appear additionally. In Levels 5 to 1 finally the hookah turns up (nos. VIII.13 ff.). The pottery of this time is more or less continuing until today in the area surrounding the now deserted ancient mound of Sonkh.

Period I. Pottery from Levels 40 to 37

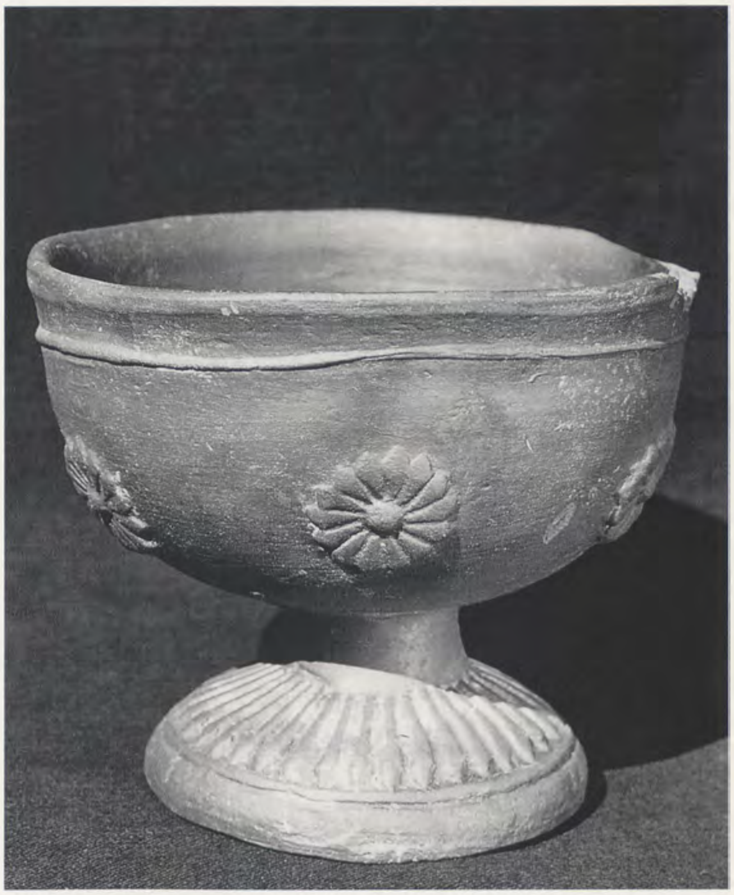
Painted Grey Ware

I.1 Bowl, lenticular bottom with carinated edge, conical wall (in-leaning), direct rim. Dark grey, black painted comb-pattern, bottom outside lighter grey, body grey, fine fabric, burnished. No. So II 5.

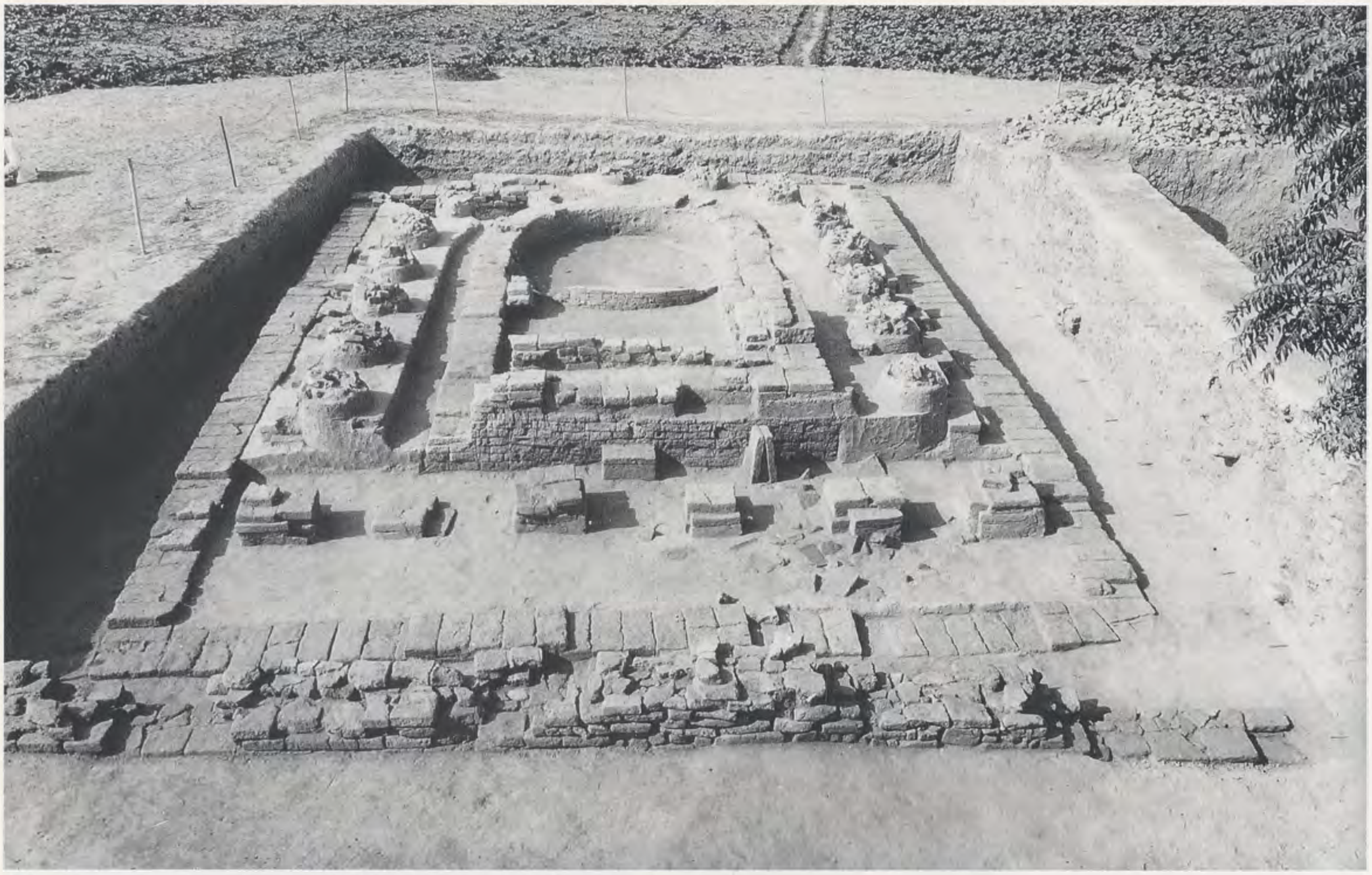
I.2 Bowl-fragment, shallow paraboloidal bottom, carinated edge, lightly in-curved wall, direct rim. Grey, wall outside reddish ochre, separated by dark grey line from grey bottom, black comb-pattern, fine fabric, burnished. No. So II 2143.



92 Spouted jar with horizontal black painted stripes. Period VI



93 Goblet with moulded bowl and stem. Period VI



II.2 Structural remains of Phase 1 and Phase 2 of the Apsidal Temple no. 2

Phase 1 of Apsidal Temple no. 2

The foundations of the outer wall of the temple extend from 6 III 9.50–17.75/Cb 10.88–10.15 up to 6 III 10.60–18.65/Cc 3.20–2.40 at the height of 14.70–14.96 m. The structure is laid out in east-west direction, only slightly deviating. It consists of the remaining parts of an apsidal cella, a row of pillar brick-foundations on all four sides, and an enclosure wall (Fig. II.2).

The *apsidal cella* has its entrance in the east and is built of mud- bricks of the average size of 48 × 23 × 7 cm. Upon the mud-bricks lay the remnants of one layer of baked bricks of the same size indicating that only the foundations were erected in mud-bricks. The outer diameter of the 60.0 cm high apse is 3.85 m, the lateral walls measure ca 5.60 m (south) and 2.50 m (north), giving the apsidal cella a length of ca 7.30 m. Into the apse is set a round, flat platform of the diameter 2.75 m which is built of mud but bordered on its open eastern side by one row of mud-bricks.

The cella is surrounded by twenty-three piles of baked bricks forming the *foundations of a row of pillars*. The bricks measure 42 × 29 × 7 cm in average, the distance of the pillar foundations (middle to middle) is ca 1.30 m, in the centre of the entrance side it widens to 1.40 m (on account of slightly narrower arrangement of the other eastern foundations). The distance from the outer side of the cella wall to the middle of the pillars is 1.20 m. Scattered along the southern front of the cella were found ten fragments of roof-tiles.

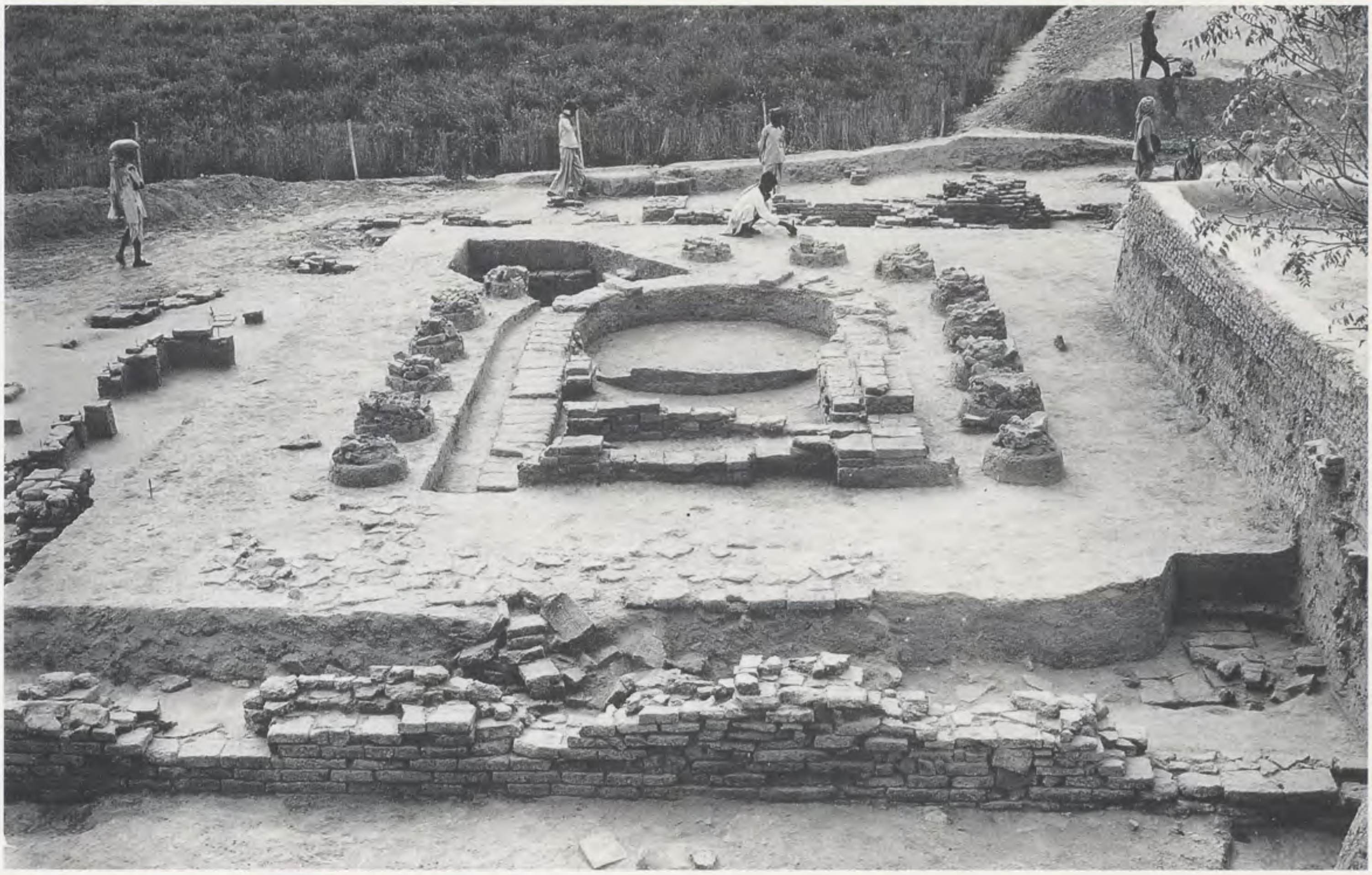
The cella and the pillar foundations are *enclosed by a wall* built of one row of baked bricks of the same size as the mud-bricks of the apsidal structure, i.e. of 48 × 23 × 7 cm. From outside to outside the enclosure wall measures max. 12.32 × 8.25 m. Founded between 14.70 and 14.96 m its height varies between one to seven layers of bricks. On the long sides the distance from the middle of the pillar foundations to the inside of the enclosure wall amounts to 0.45 m only, showing that in case of a higher outer wall passage would have been impossible. Therefore it is safe to assume that the surrounding wall was rather enclosing a platform. On the eastside the distance from the middle of the pillars to the outer edge of the platform measures between 1.70 and 1.90 m, thus indicating a larger, presumably roofed entrance area.

Just in front of the cella have been found three baked bricks of the size 48 × 23 × 7 cm which were placed together upright and forming a hollow triangle. This obviously intentional arrangement remains unclear in its meaning.

The other Structures of Phase 1

To the east of the temple entrance, in 6 III 13.40–19.20/Cc 12.10–18.80, have been exposed the remains of a squarish structure built of mud aligned in the same direction as the temple. The walls are founded at 14.54–14.71 m but most parts of them were in a dissolving state. Only the western stretch, reaching up to 15.26 m, permits one to measure the thickness of the walls with at least 0.65 m. Yet, this might be an overbuilt part of wall because on its western flank a small stripe of mud (which in its northern end seems to contain fragments of bricks in the size 42.0 × 31.0 × 8.0 cm) is situated in front of it.

In front of the middle of this western wall a spot of floor of baked bricks of the size 45.0 × 24.0 × 7.0 cm came to light, measuring 1.80 × 1.90 m.



II.3 Structural remains of Phase 2 of the Apsidal Temple no. 2

Traces of a Transitional Phase

The second temple structure, founded directly on and around the walls of the first, and therefore denoted as "second phase" although it has been built not less than two centuries later (CHRONOLOGY, p. 427), is surrounded by quite a number of contemporary remains of structures. But here and there, as will be pointed out in a later context, baked bricks of the size 40 × 25 × 6.5 cm occur in otherwise Kuṣāṇa structures. This is especially the case in 6 IV/Cb with its monastery-like cella construction along an open yard. Small fragments of other structures of the same time have been exposed in 6 IV 1.0/Cc 8.0–18.5 and 6 III 4.0–5.5/Cb 4.1–5.2 which do not betray any context.

In the south-east corner of the "island", i.e. in 6 III 1.5–6.0/Cc 15.0-Cd 3.0, an eight meter long fragment of a drainage built of 40 × 26 × 7 cm large baked bricks runs in SW-NE direction. Its surface lies at 14.50 m in average, the gully is lowered to 14.20 m. The fragment ends on both sides in the slope of the "island".

Although the heavily ploughed up ground did not preserve any larger connected structure it seems evident that in the time between Phase 1 and 2 of the temple, i.e. most probably in the Kṣatrapa period of Mathura, new structures have been added, thus indicating that the early shrine was in use for a long time.

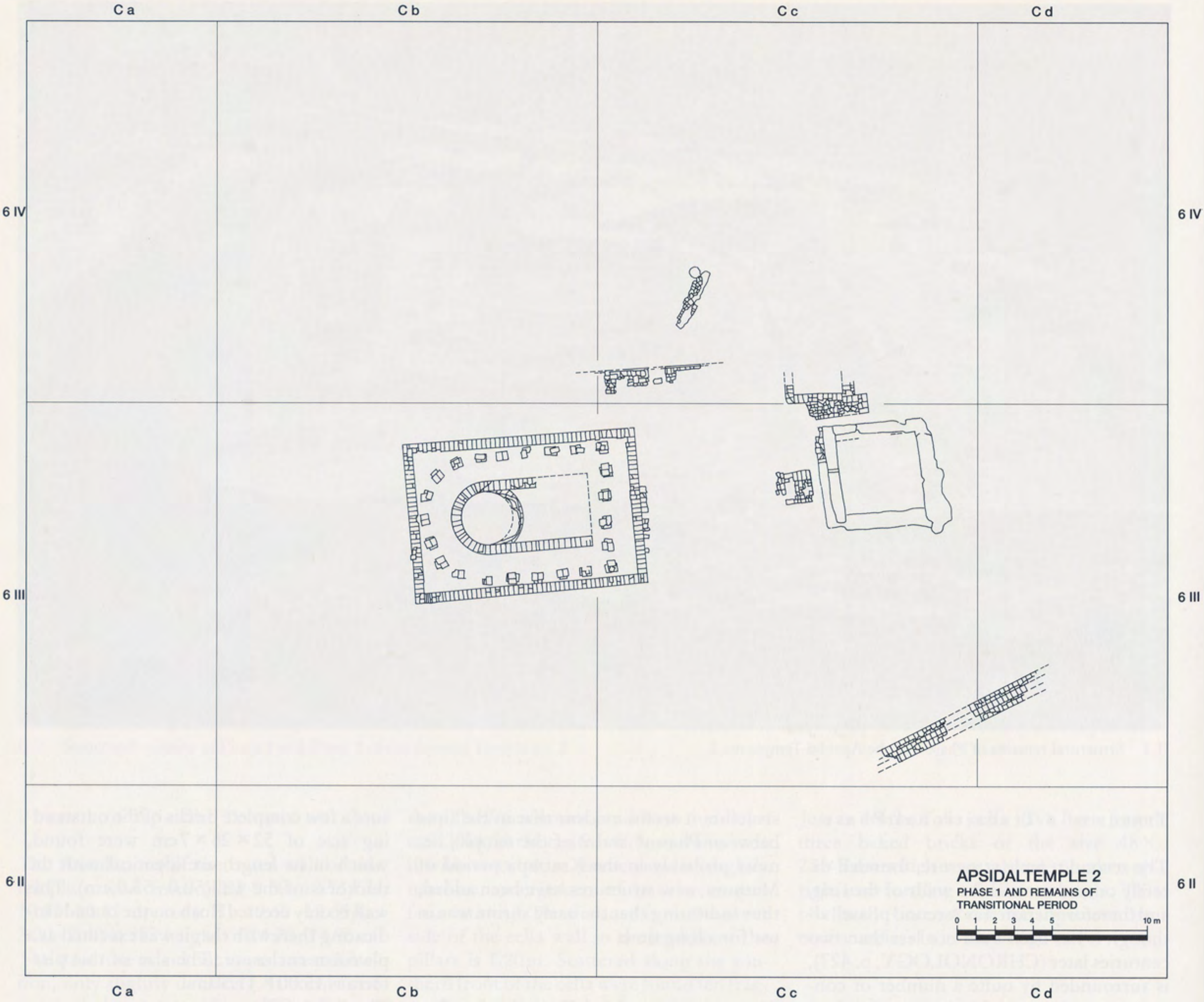
Phase 2 of Apsidal Temple no. 2

The structure erected on the island during this phase could be traced by 1) the remains of a new enclosure wall of the temple, 2) fragments of superstructures above older walls of the temple, 3) a new row of pillar foundations, 4) remains of structures around the temple and scattered over the whole area of the "island". In addition, a number of stone pieces from a *toraṇa* and a *vedikā* surrounding the temple complex came to light.

In the time of Phase 2 (Fig. II.3) the platform of the temple had been enlarged by setting up a new *enclosure wall* outside the older structure. Of it, only the eastern side is preserved in a longer section, built mainly of brickbats and bricks of the size 38 × 23 × 6 cm. On the north-east corner and in the north and west wall of this enclosure a few complete bricks of the outstanding size of 52 × 26 × 7 cm were found, which in its length are identical with the thickness of the wall(50.0–53.0 cm). This wall is only erected flush on the outside indicating therewith that it was executed as a platform enclosure. The size of this platform is 15.00 × 11.50 m.

The cella of Phase 2 is preserved alone in the remains of the 1.0 m thick *superstructure* built over parts of the northern lateral wall and the brickwork erected on the entrance side. The bricks used were mainly 38 × 23 × 6 cm in size interspersed with such of 42 × 30 × 6.5 cm hinting at a transitional phase as mentioned above. In the other parts of the cella not a single brick of the superstructure has been found, so that the blank mud-brick apse and remaining lateral walls of Phase 1 were all that was left. One should, however, always be aware that these structures were lying directly below the surface and were, therefore, in its upper part highly endangered by detection through people living on the place.

With the exception of the entrance side the temple was surrounded by another row of *pillar foundations* formed of brickbats of ca 38 × 23 × 6 cm large bricks. In the bases of



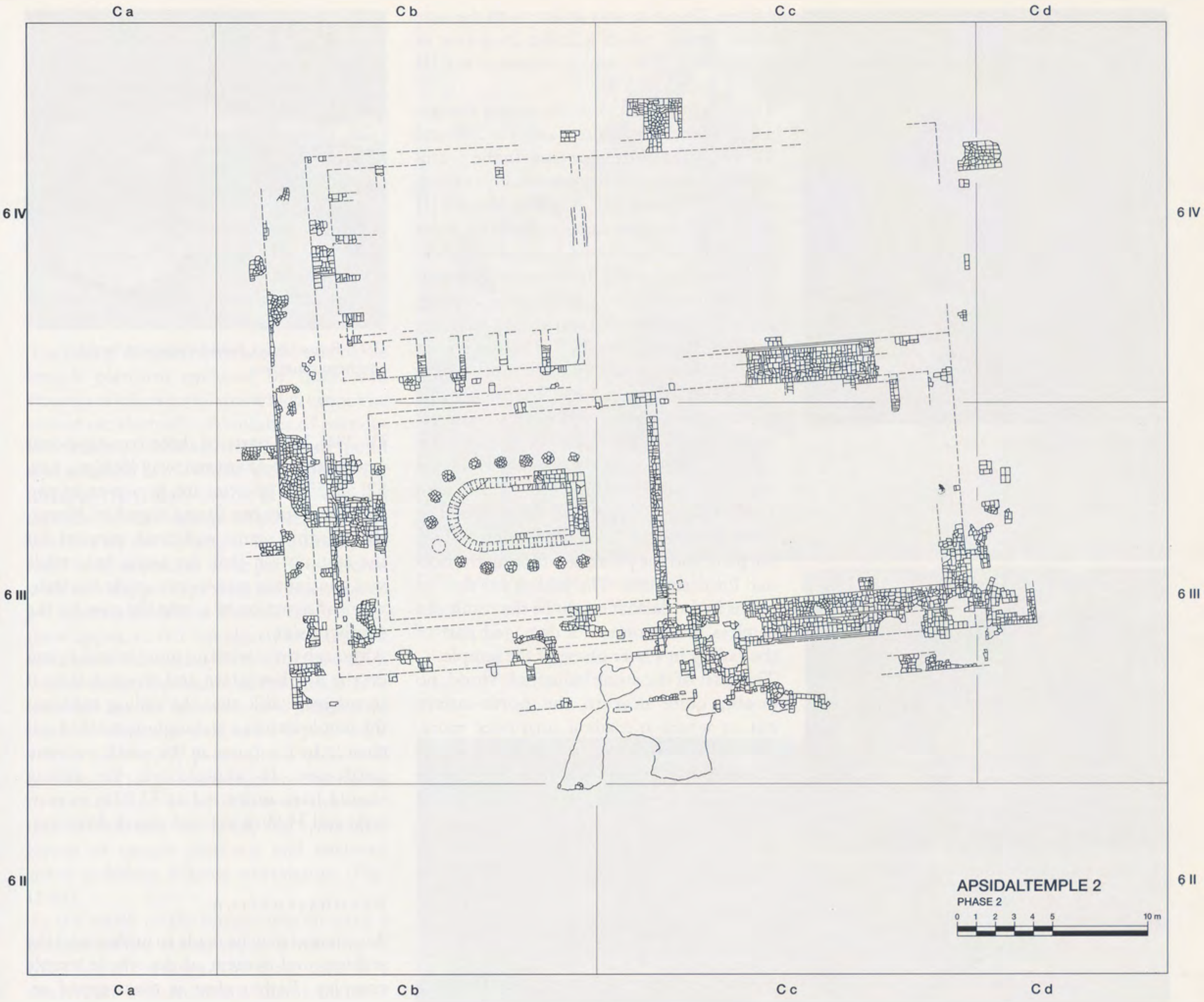
at least four of the previously fifteen pillars 18 cm deep holes were found for the insertion of the pillar shafts. The distance from the centre of each pillar to the exterior edge of the apsidal wall is about 0.85 m, the distance between the single pillars fluctuating between 1.20 and 1.40 m.

As distinguished from the layout of Phase 1 the pillars stand now considerably closer to the cella so that in view of the simultaneous enlargement of the platform the temple cella could best be circumambulated on the outer side of the pillars.

The excavation of the remaining area around the temple revealed a number of *fragmentary structures* in all directions. East of the eastern wall of the temple enclosure extends a free space of 14.5 × 11.5 m, i.e. of nearly the size as the platform. To the north and south this space is bordered by 2.00–2.30 m thick walls (Fig. II.4). The closing eastern structure seems, so far the remnants permit one to conclude, to have measured only 1.25 m in thickness. The bricks used are of so different sizes as 39 × 24 × 5.5 cm, 38 × 23 × 5 cm and 32 × 24 × 6 cm. The southern wall continues directly along the temple platform and joins the structures on the western side of the temple where it turns into a staircase construction (see cross-bar with oblique ends, Sculpt. no. 46). The parallel brick-path in front, as far as not part of this stairway, might have been connected with the southern line of foundations of the stone railing to be discussed below.

Remains of such staircases could be traced also in the north at 6 IV 13.35–16.15/Cc 1.7–4.5 (Fig. II.5) and in the south at 6 III 4.8–7.2/Cc 5.5–8.1 (Fig. II.6), to the side of which yet another cross-bar of a staircase balustrade was found (Sculpt., no. 47). The few scattered fragments of structures on the eastern flank (6 III/Cd) do not answer the question whether there was a staircase on this side too, or not. To the east of the southern stairway a conspicuous round brick foundation of 0.85 m diameter marks the position of a *jayastambha*, presumably (Fig. II.7).

North of the Apsidal Temple were exposed small fragments of a long, 1.15 m thick wall running parallel with the northern temple enclosure in a distance of 0.60 m. This wall



was no doubt turning rectangularly towards NNE in 6 III 20.0/Cb 5.7 and joined the fragments appearing in 6 IV 6.0–9.6/Cb 5.30–6.45 before it turned EEN once more in 6 IV 12.8/Cb 4.8 forming now a parallel northern wall, thus completing an at least three-sided enclosure along a square yard of 14.0 × 14.0 m. On the inner side thinner walls, generally 40 cm thick, are protruding rectangularly. They are built in regular distances forming small cellas of the size of ca 1.75 × 2.00 m (Fig. II.8). In the foundations the brickwork contained quite a number of bricks of the size 40.0 × 25.0 × 6.5 cm indicating a possible intermediate phase as discussed above.

At 6 IV 13.7/Cb 18.95, i.e. on the outside of the north-eastern corner of the cella yard and near the northern stairway, a brick pedestal with a stone plinth was unearthed, presumably of a Nāga image (Stone Sculpt., no. 20).

The last structural fragment to be mentioned is a short part of wall in 6 IV 12.1–13.5/Cc 19.0-Cd 0.8, aligned in east-west direction and built of bricks of the size 38 × 23 × 5 cm. Upon and to the sides of this wall were found a number of *stambhas* and *sūcīs* of the stone railing to be discussed below (Fig. II.9). Just 0.50 m north of it, still in situ, stood the lower part of an octagonal stone pillar measuring 49.0 cm in height and 14.0 cm in diameter (Stone Sculpt., no. 21).

The Stone Railing and the Gate

South of the Apsidal Temple, at a distance of ca 5.50–9.00 m from the platform, ten cross-bars (plus numerous small fragments) and one pillar of a stone railing came to light in 6 III 0.0–6.0/Cc 0.5–3.3, accompanied by ten pieces of sculptures from a gate *(toraṇa)*. The find-situation of these stones indicates that the railing in its entirety fell towards south when collapsing. The basis line had therefore to be expected slightly north. Unfortunately, not much of the foundations of the railing has been found. Two piles of its brick base, located in 6 III 3.8–3.9/Cb 16.7–19.0, betray an alignment parallel with the southern temple enclosure wall, in a distance of

II.4 Southern wall in 6 III/Cc

II.5 Remains of the northern staircase

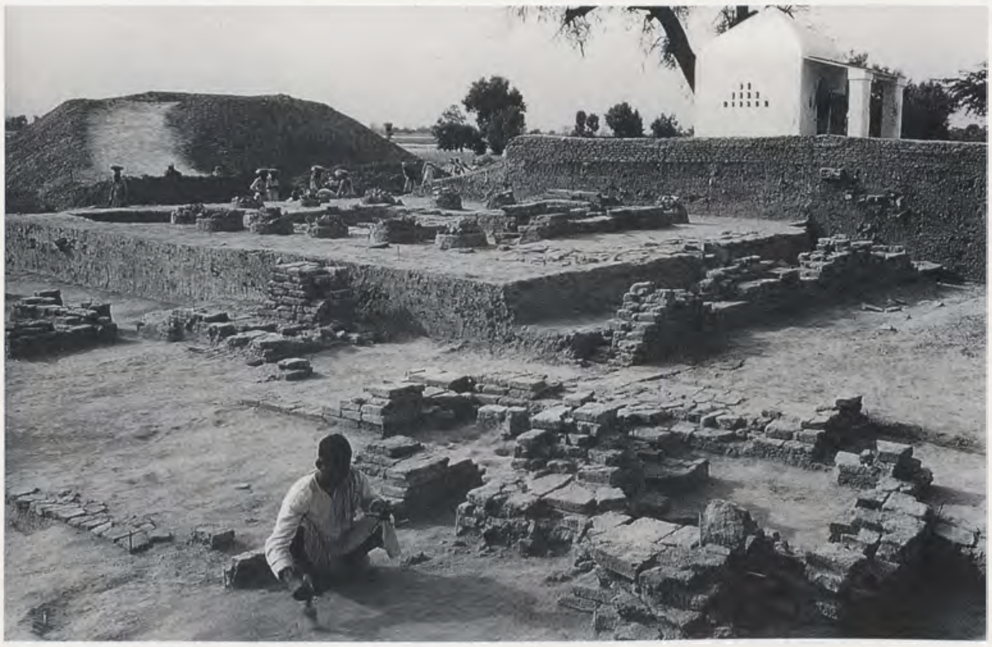
4.80 m. This is exactly in line with the base of the gate of which a 2.50 m long row of bricks (38 × 23 × 5 cm) is preserved in 6 III 4.3–4.4/Cc 2.8–5.3.

There is no doubt that the railing continued in a straight line towards the SW and SE corners of the temple area. In the southeast the railing was most probably turning rectangularly towards NNW in about 6 III 6.3/Cd 4.0, because quite near to this point one cross-bar was found lying upon brickbats (Sculpt., no. 45). In its course this eastern line was flanked again by a copingstone (Sculpt., no. 50) and a cross-bar fragment (So IV 204) in 6 IV/Cd before it ends near the find-spot of another three railing pillars and five cross-bars (Sculpt., nos. 30; 48; 49) lying upon, and next to, the reported fragment of wall in about 6 IV 12.1/Cc-Cd. To one's amazement, all the stone pieces of the railing found here are of a much simpler type than those found in other parts of the "island": The cross-bars are plain and the pillars are lacking the normal lotus rosettes. The reason for this remains in the dark; it might be the result of a careless renovation of a damaged part of the railing in a later phase of the temple.

This part of the stone balustrade stood, no doubt, quite near to the north-eastern corner where it made a turn once more, now from the east towards west. Unfortunately, no remnants of this turn could be traced. But four stone pieces were found lying quite near to the expected course of a northern railing: a cross-bar fragment with lotus rosettes in 6 IV 14.75/Cc 12.15 (So IV 284), and parts of three coping-stones near to the northern stairway (Sculpt., nos. 52; 53; 55). The latter are, however, of two different types not fitting together. Nevertheless, this seems sufficient support for the assumption that the stone balustrade was continuing east-west outside the stairway construction as it was the case on the southern side.

II.7 Round brick foundation close to the southern staircase

Although there were no more stones found on the north-western and western sides it seems inevitable that the railing enclosed the whole area in a rectangle as marked out already by its course in the south, east and north-east. In completion, the railing should have measured ca 43.00 m in east-west and 34.00 m in south-north direction.



II.6 Remains of the southern staircase

Reconstruction

An attempt may be made to understand the architectural context of the whole temple complex. Rather clear is the stepped arrangement of the structures up to the temple platform. Starting from the level of the surrounding stone railing the stairways led up to the broad first enclosure wall, ca 0.75 m above the ground, to be considered as a foot path round about at least the temple and its opposite free space in the east. From this path more stairways were leading to the once 0.75 m higher level of the temple platform.

Thus a clear impression arises of a well arranged construction in Phase 2 of the sanctuary: The Apsidal Temple no. 2 as the main building, standing on the platform, towering over the surrounding other structures. The temple itself consisted of an apsidal cella closed on three sides and roofed with a vault which was provided with a lean-to roof constructed of wood, running around the temple and covering the space between the cella and the surrounding row of pillars. The vault was carrying pinnacles which were, most probably, of the green-glazed variety (Pott. Obj., no. 1).

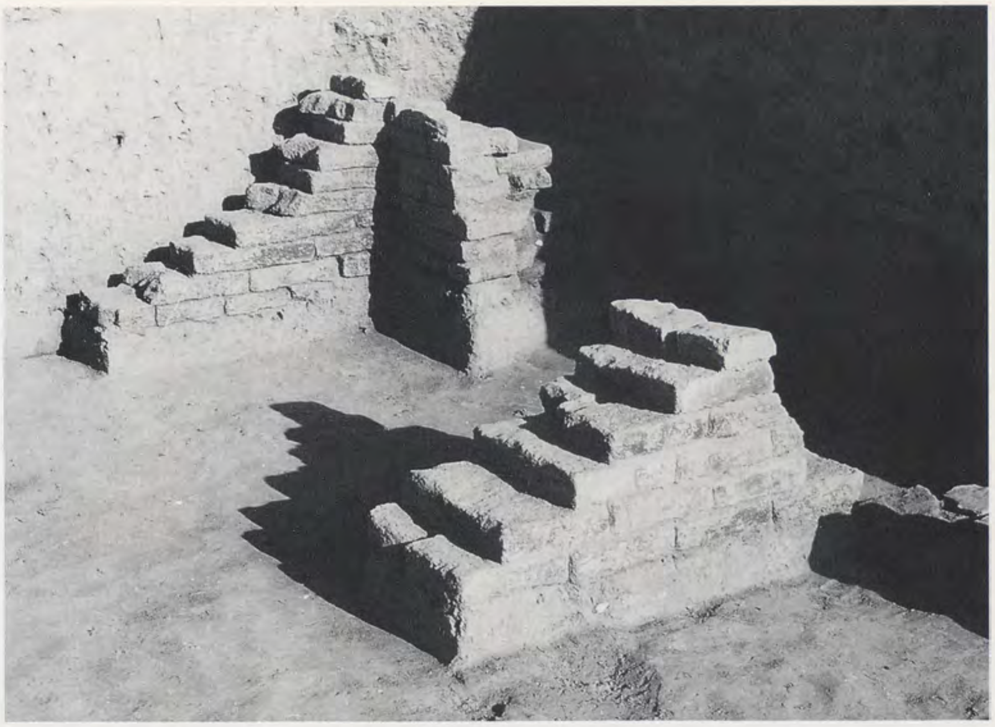
The hard, round mud-base forming a complete circle within the apse would most probably have served as base for the main image. The entrance was furnished with an arch-shaped, both-sides carved stone tympanum placed above the doorway leading into the cella (Stone Sculpt., no. 23). Most probably this tympanum was resting on likewise carved door-jambs framing the entrance.

The nearly symmetric area to the east of the temple platform enclosed by thick wall structures offers problems which cannot be solved satisfactorily. A number of particulars seems to indicate that a temple pond was situated here. There were found, for instance, strikingly sandy layers with an unusual concentration of pottery on the westside of the rectangle. In addition, the thick wall structures were partly plastered with mortar, perhaps with the intention to get a better isolation. On the other hand, there appears a flat but clearly set plinth of brickwork measuring 0.65 × 0.75 × 0.25 m with a sharp depression in the centre as if intended for the insertion of a pillar. And from the northern wall, in 6 IV 19.5–6 IV 1.2/Cc 15.5–15.9, protrudes a thin wall founded too high for a structure belonging to the assumed basin. Whatever the function of this area has been, the symmetric layout of temple platform and enclosed space indicates a close correlation (Fig. II.10).

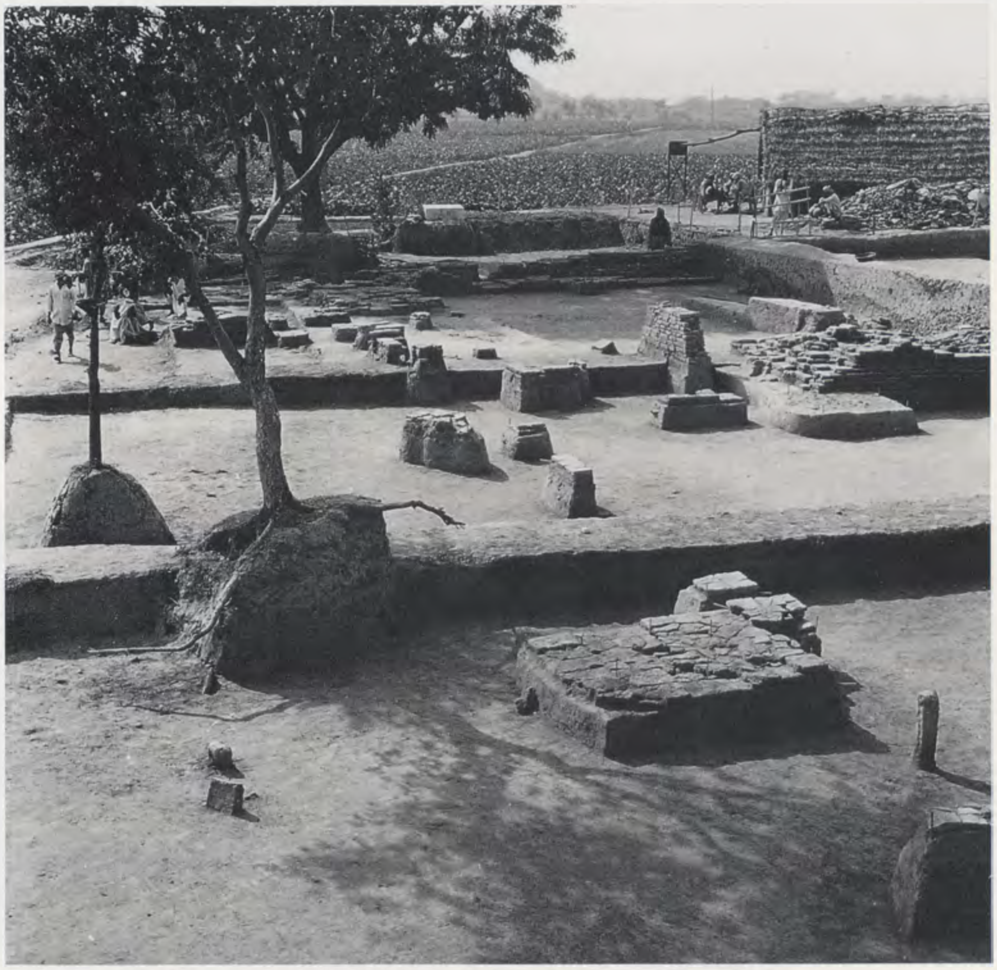
To the north of the temple was situated a monastery-like construction consisting of rows of cells arranged on three sides of a courtyard. Unfortunately, this is the spot where the modern temple is placed so that the excavation had to stop here. Nevertheless, the layout as documented in the plan is sufficiently clear.

The north-eastern quadrant of the area, the most disturbed part of the "island", did not betray any special function. Except for the part of wall in the north-eastern corner with the pillar in situ next to it, and the northern entrance construction no other structural remains were found here.

A look at the plan informs us that the "island" in the fields comprises, fortunately, the whole ancient temple complex, how scanty the remains may be. It is likewise clear that the sacred area was rectangular in shape and was enclosed by a stone railing measuring in all ca 43.00 × 34.00 m. Of this railing, the most remarkable pieces have been found on the southern side where, besides cross-bars and a pillar fragment, parts



II.8 Remains of cella structures in 6 IV/Cb

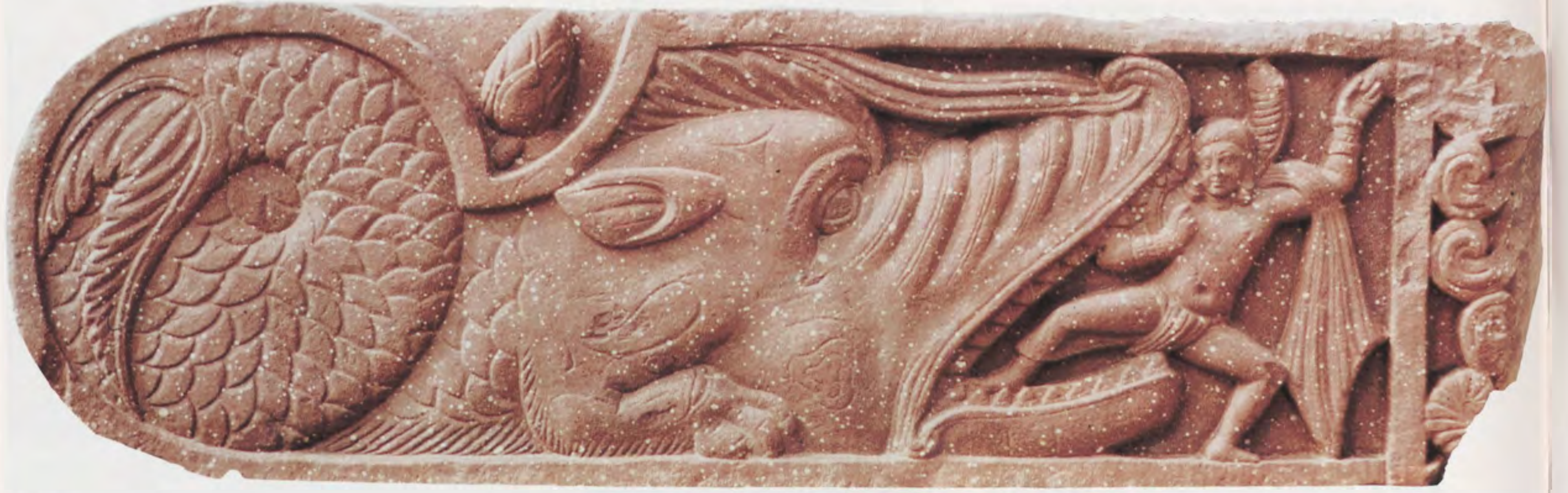


II.9 Remains of eastern enclosure wall (NS) with base of octagonal pillar (right)

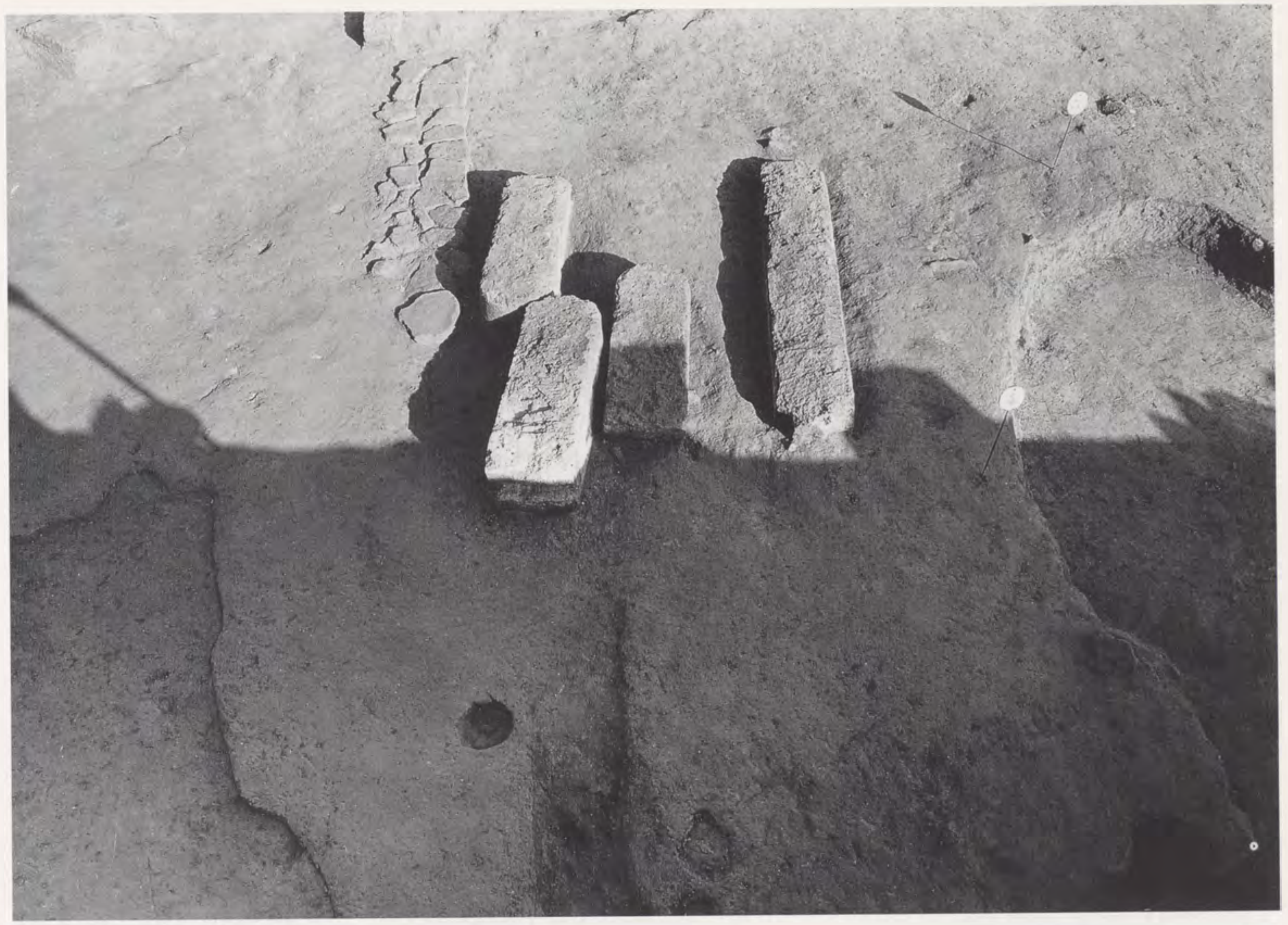
of a *toraṇa*, carved on both sides, came to light (Figs. 11, 12). They were all corroded on the upper side as they lay very close to the surface of the rather salty ground. Fortunately, the side facing downwards survived in a remarkably good condition. The position directly under the surface is, in addition to that, also responsible for the total loss of the majority of the architraves and all of the *toraṇa* pillars which must have been exposed times ago and most probably taken in use for other purposes. A fragment of one end-piece, i.e. the eastern one of the bottom architrave, also unearthed prior to the excavation, obviously found its way to the art market; it has been published in Czuma/Morris, 1985:no. 10,p.62. An impression in the ground exactly fitting the outline of this published piece has been located, cleaned and photographed by us.

Erected in a distance of 4.80 m from the southern enclosure wall of the temple platform, the gate stood somewhat left of the stairway construction. It was composed of two pillars supporting a superstructure of three architraves with voluted ends (Fig. 13). Separating the architraves were four cubic blocks set in pairs vertically above the corresponding floral squares in the lintels. Judging by the indentations of different shapes on the top of the lower middle lintel (the only one preserved), the open spaces between the architraves were occupied by screens (Sculpt., nos. 6, 7) and uprights in the middle as well as by lions (Sculpt., nos. 8, 8a) upon the voluted end pieces. Whether there were any decorative figures crowning the top architrave remains in the dark. Between pillars and voluted ends of the lower architrave bracket figures were added in the shape of beautiful Śālabhañjikās.

From bottom to top, i.e. the upper edge of the top architrave, the gate had a height of ca 3.45 m. The architraves were of different length, decreasing from the lower to the upper one, measuring ca 2.60, 2.50, and 2.40 m respectively. The height of the architraves, the separating cubic blocks and with them the open space between the lintels ranges between 21.0 and 22.0 cm. The distance from the lowest point of the bracket figure to the bottom of the lower architrave amounts to 0.60 m.



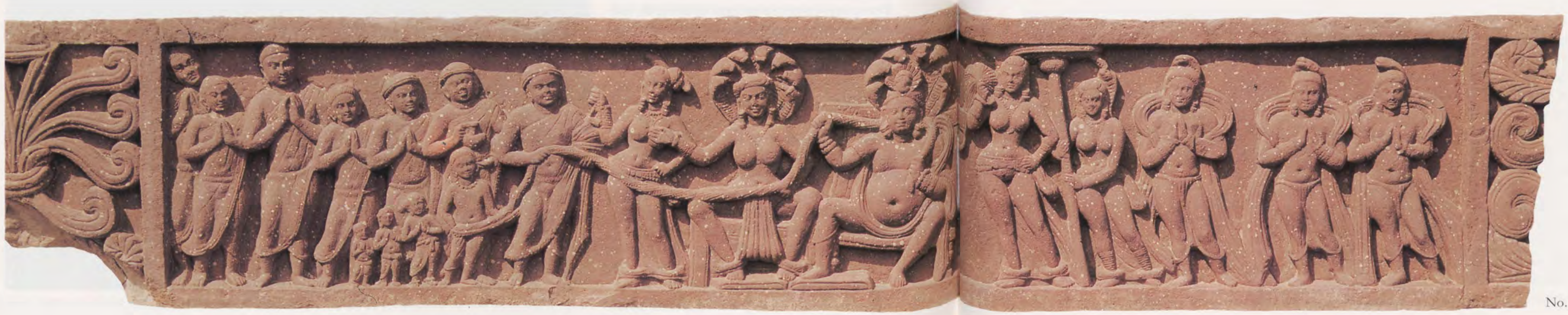
No. 3



II.11 Four sculptures of the gate in situ

It is difficult to determine whether the railing was connected directly with the pillars of the gate or set apart by a joining link. In any case, there was no space left for a deeper gateway construction.

The three components of the railing, i.e. pillar (*stambha*), cross-bar (*sūcī*) and coping-stone (*uṣṇīṣa*) were, as a rule, carved on both sides. The pillars were, as the one fragment of a decorated specimen (Sculpt., no. 27) betrays, adorned with two complete and two half lotus rosettes on the one, and two relief medallions together with



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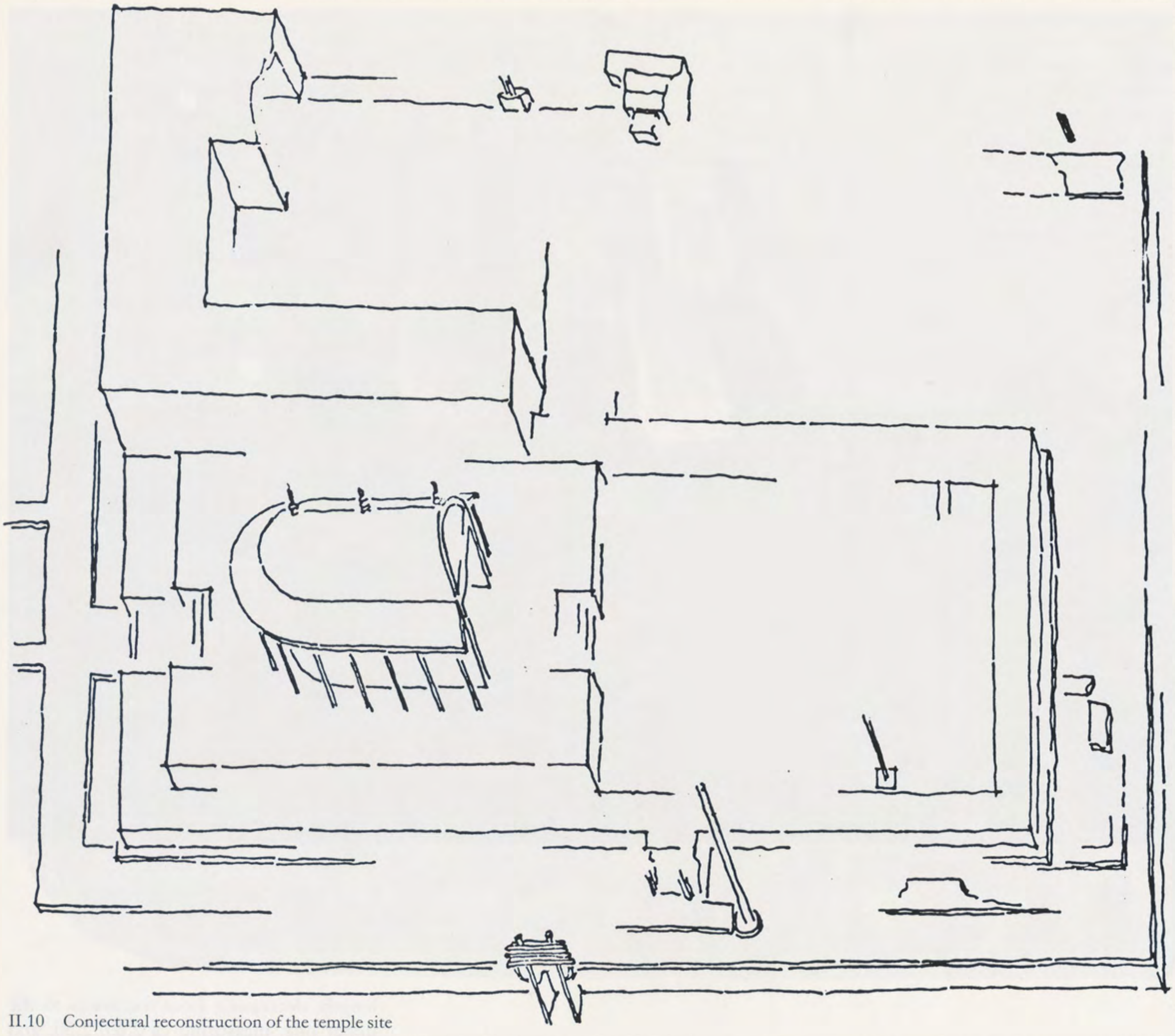
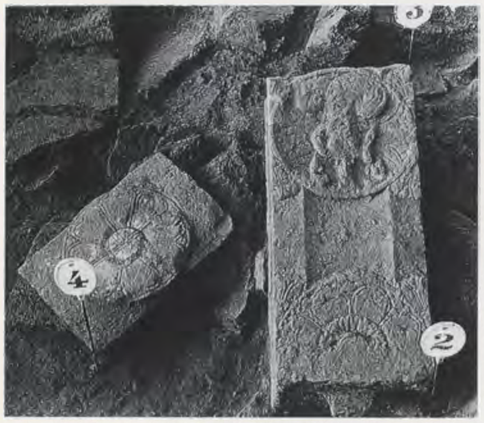
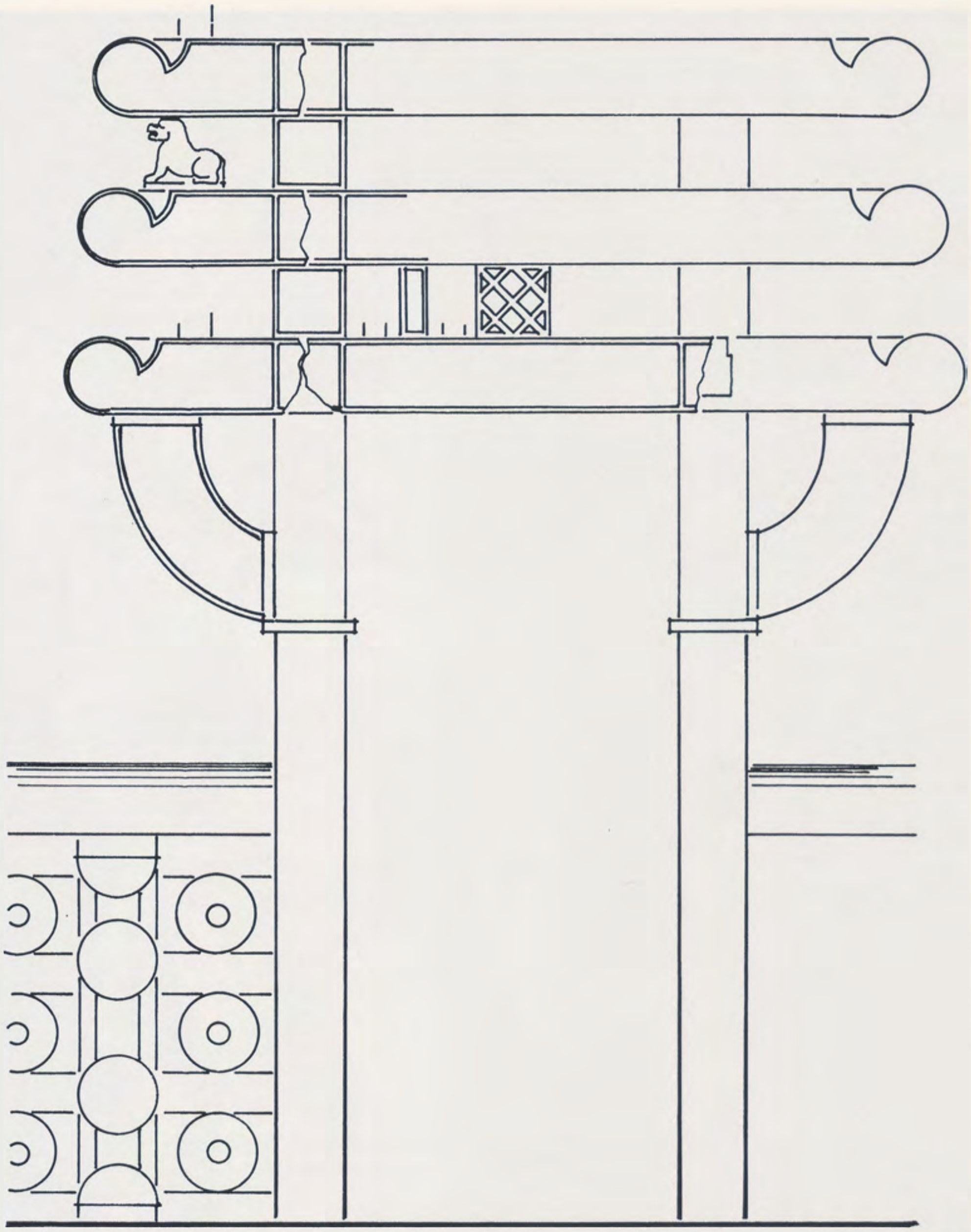


II.10 Conjectural reconstruction of the temple site



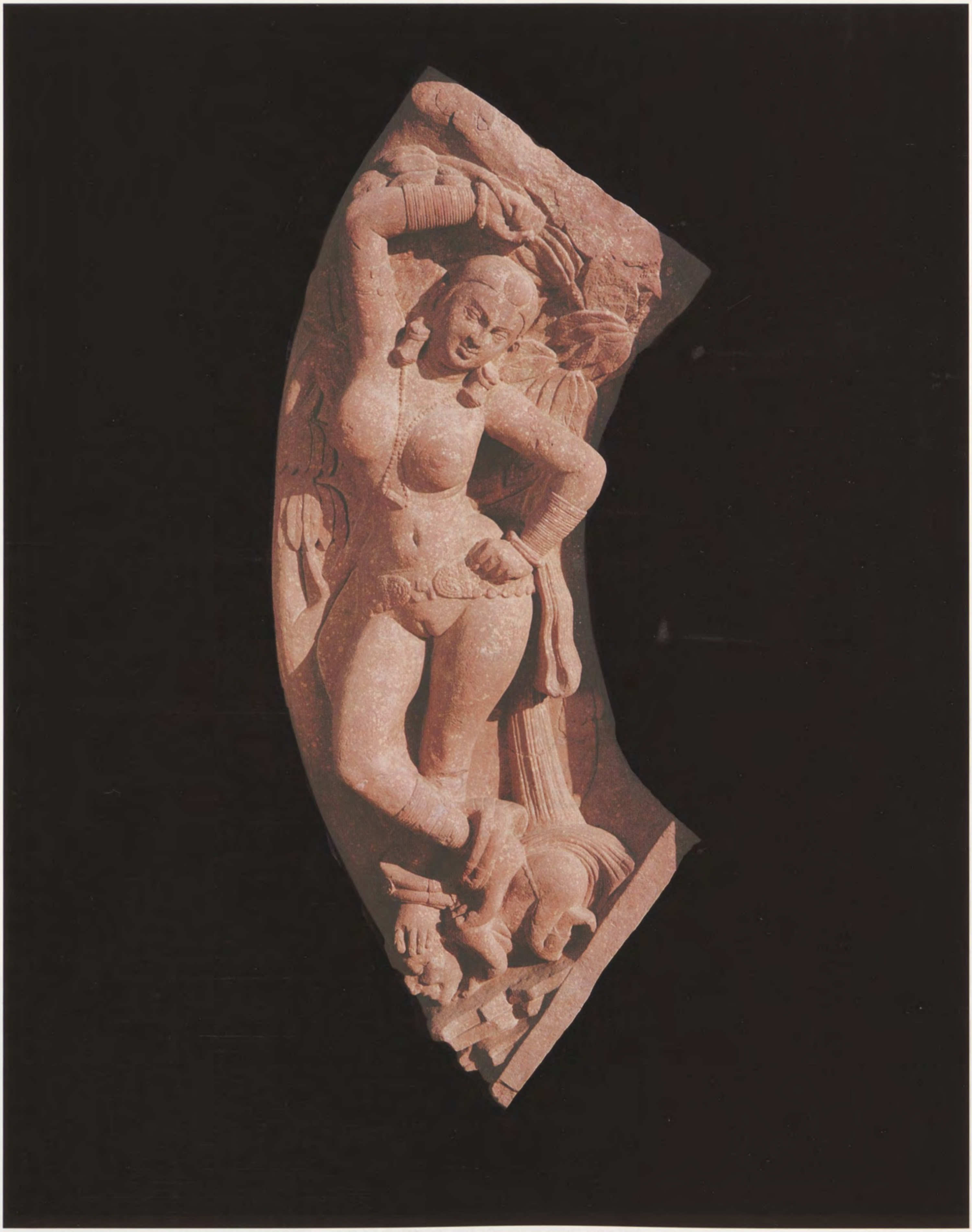
II.12 Fragments of the railing in situ



II.13 Reconstruction of the southern gate

two half lotus rosettes on the other face. The cross-bars show lotus rosettes on either side. The main type of coping-stone found is decorated with a bell and creeper design (Sculpt., nos. 50–52) whereas a second type, recovered in the north, shows vertically arranged lotus petals and sepals (Sculpt., nos. 53–55). An exception are the pillars and cross-bars found in the north-eastern corner of the area being devoid of a medallion and, in the case of the cross-bars, of any decoration at all.

The pillars show three mortises on their left and right sides for the insertion of the cross-bars which are 30.0 cm long in average so that the distance from pillar to pillar amounted to ca 26.0 cm. Including the coping-stone (h. ca 22.0 cm) the railing was ca 1.35 m high. One pillar (Sculpt., no. 28) does not fit the measurements of the outer railing. It was perhaps part of the stairway balustrade to which the two cross-bars (Sculpt., nos. 46,47) with oblique ends certainly belong. Unfortunately, these are the only remnants of inner railings. Considering that, in addition, the brick foundations of the stairway construction are likewise hopelessly disturbed, a clear reconstruction of this part of the complex is rather impossible.



No. 5

III. THE FUNCTION OF THE TEMPLE

The Apsidal Temple no. 2 at Sonkh experienced two main periods of religious use connected with Phase 1 and 2 of the shrine. In the immediate surroundings of the structures of Phase 1 not a single object could be found which would help us to ascertain to which cult this older sanctuary was dedicated.

Quite different is the situation with regard to Phase 2 of the temple. Here we notice a more than conspicuous accumulation of finds with Nāga character. There are to be mentioned e.g. the architectural pieces of the southern gate with the bottom lintel depicting a Nāga court scene, the voluted end pieces showing a Makara with a Nāga as his playmate, and the cubic block with two intertwined three-headed cobras (Sculpt., nos. 2, 3, 4, 6). Near to the gate was found the pillar fragment with a Nāgarāja under a seven-headed cobra-hood in the medallion (no. 27). Most probably, the medallion moulds depicting a Nāgarāja recovered in the main excavation area are copied from other pillars of this railing (Part I: Terr.Hum. Fig., nos. 142, 143, 144). Another pillar, unearthed on the western side, shows three cobra heads in its bottom rosette (no. 28). To the north-east, in 6 IV/Cc, came to light the relief fragment of a "reading" Nāga, the upper part of a Nāginī with a hood of three cobras, and another small hood fragment (nos. 16, 17, 18), made like all the others of the mottled red Kerauli sandstone.

In the north, west of the stairway, the stump of a Nāga image stood still in situ (no. 20). Not less important are the three surface finds of larger Nāga sculptures found previous to the excavation in the surrounding fields (nos. 19, 24, 25).

The Nāga context is clearly recognizable also in the terracotta material found on the "island". The Nāga hood (Terr.Moulds and Figs., no. 7), to which the hollow face (no. 6) and the hand holding a flask (no. 8) fit in size, seems to prove that rather large terracotta Nāga figures must have existed in the temple area likewise. Five fragments of small terracotta snakes speak, in addition, of the frequency and popularity of Nāga figures on this very place (nos. 14–18). A non-figurative piece from among the relevant finds is an inscribed seal with the remains of three rectangular labels each having two lines of Kuṣāṇa Brāhmī script (Misc.Terr.Obj., no. 1) mentioning an *ahikośika*, the snake connotation of whom is obvious.

The accumulative representation of Nāgas as documented in these finds has to be complemented by two other most important sculptures. One, from a private house near the temple, is a large tympanum fragment (Sculpt., no. 23) with reliefs on both sides which show a man climbing a rock. He is entwined by a snake. But he is not fighting the snake which is rather a part of him: he, in fact, is a Nāga. The same is the case with the second sculpture, namely, the male statue that has been found times ago and around which the modern temple has been erected (Sculpt., no. 22). The stone is carved on all four sides. On the obverse and reverse the figure has the right hand raised and is hooded by a snake canopy with seven cobra heads. On both the narrow side-portions we find a seven-limbed and seven-headed snake decorated with three lotus-stalks. The figure no doubt represents a Nāgarāja.

By this accumulation of Nāga figures it has become quite evident that the upper structure of the Apsidal Temple no. 2 at Sonkh was dedicated to the Nāga cult. It is therefore not far-fetched to assume that the four-sided large Nāga sculpture had originally been standing in the apse of the temple to be worshipped as the main image. If so, the Nāga tympanum fragment was most probably part of the doorway decoration of this temple.

It might be difficult to comprehend how Nāgas could be worshipped in such sophisticated a temple and surroundings as the Sonkh complex once had represented. To perform a Nāga ceremony as it is done e.g. annually on the occasion of the Nāga pañcamī festival in the rainy season and of so many other Hindu festivals it did not need a temple of its own. The answer is simple: not theriomorphic snakes were the main object of worship here but an imaginary snake-god, a personified Nāgarāja, here in all probability, Vāsuki, who was a member of the Hindu pantheon. To understand the development of the Nāga cult up to this point it might be useful to sum up its essential stages starting in the Vedic times.

Some Remarks on the Development of a Nāga Cult

In the Vedic texts the word mostly used for snake is *ahi* (tying, strangling). The term *ahi*, as also the compounds formed of it, express the fear of this animal, but also the wonder at its uncommon form and the admiration of its beauty, leaving no doubt that at the beginning of the snake-worship there stood the direct adoration of this animal in its different species.

The Maitrāyaṇī saṃhitā for instance tells us of the homage to the snakes which move along the earth, which are in the sky, which lie in holes and which have made their abodes in the water. Already in the early groups of texts snakes are called by special names, and thus personified. The personification leads to the deification, to the worship of snakes as semi-divine beings, above all, as the deities of the waters, springs and rivers.

While the earlier texts contain respectful invocations of snakes, sacrificial rites are described in the later works of the Sūtra period (ca 600–400 BC), which enclose prescriptions as to when and how the offerings to the snakes should be made. Some of these comply with the rites still practised today at the Nāga pañcamī ceremonies. No wonder that in the succeeding period of the Indian Epics, in the Mahābhārata and the Rāmāyaṇa, as well as in the Purāṇas, there appeared genealogical stories about the divine origin of the Nāgas and narrations of the deeds of famous Nāgas mentioned by name, who appear to be not only Nāgarājas but Nāgadevas as well.

Although the Nāgas live in different places and can assume different shapes, their character as creatures of the waters is emphasized again. While the Vedic texts still mention different abodes for obviously different families of snakes, the Nāgas in the Epics are allocated to a region of their own. This is placed under the earth, in the underworld *pātāla*, named *nāgaloka* as well. It is the netherworld, the world of the fathomless waters. So there exists now the notion of a division of the world into a divine world (*devaloka*), a human world (*mānuṣaloka*), and the underworld (*pātāla* or *nāgaloka*) as the abode of snakes.

In the Buddhistic scriptures the Nāgas appear in a group of eight classes of demigods, as for instance Devas, Yakṣas, Nāgas, Gandharvas, etc.. Grünwedel (1901:p.43) summarizes the Buddhistic notion of the Nāgas in the remark that they "form a separate snake world, the inhabitants of which have the power of assuming human forms. They are fabled to reside under the Trikuta rocks supporting Mount Meru, and also in the waters of springs, lakes, rivers etc., watching over great treasures, causing rain and certain maladies, and becoming dangerous when in anger".

The popularity of the Nāgas equals that of another group of minor deities, i.e. the Yakṣas, famous as the guardian deities. Both the groups, Nāgas and Yakṣas, are worshipped in the early historical period under rather similar conditions, and both are exposed to the danger of being propagated by the main religious movements as adherents to their doctrines or, in special cases, of becoming integrated in their respective pantheon.

One gets the impression that with the beginning of the Epic Period, with the creation of a Nāgaloka, a schism in the conception of the Nāgas has taken place. The Nāgarājas called by their names in the Epics and the Nāgarājas of local genesis cannot be identified with common snakes living on the earth, with the dangerous, poisonous reptiles under the sun, because they, the Nāgarājas, are a product of imagination, and as such, acquire a kind of independence which has nothing to do with the reality. Thus in this edifice of thought there is also place for the ideas of courtiers of the Nāga kings, of a Nāga queen, of beautiful Nāga damsels, all of them living in a fantastic world of riches and splendour. Their worship ends up in a genuine cult of god demanding a place of worship of its own.

Evidence of the Existence of Ancient Nāga Shrines and Temples

For a long time we had to ask if there is any hope at all of proving the existence of a more sophisticated Nāga cult in special places of worship, perhaps even in Nāga shrines or the like. Ananda K. Coomaraswamy (1928:part I, pp. 17–24) tried to establish a similar cult with regard to Yakṣas. He expressed the opinion that "the existence of images in every case implies the existence of temples and cult". From literary evidence he drew the conclusion that "the essential element of yakṣa holystead is a stone table or altar placed beneath the tree sacred to the Yakṣa", but that "in many cases yakṣa shrines, however designated, were structural buildings … with doors, and arches and [with] images and altars within the buildings". He felt himself not in a position to provide material proof, because there are, even up to now, no relevant remains of temples or shrines known to us.

Since the situation of the Nāgas is, in many respects, similar to that of the Yakṣas, it should be asked what evidence we have got, prior to Sonkh, to show the existence of places or buildings for the Nāga cult. The starting point is here just the same as with the Yakṣas: There are images representing Nāgas in different shapes and contexts. If Coomaraswamy is right, here again the very existence of images implies the existence of temples and a cult. The centre of the production of Nāga figures was no doubt Mathura, the most important art school in ancient India. Here quite a number of Nāga statues had been created during the first centuries AD, the oldest one belonging even to the 1st century BC (N. P. Joshi 1966: pl. 1). It is of the type of the famous old Yakṣa images of that school, standing in a very upright position, the lower body clad in a dhotī, a presumably seven-headed cobra-hood rising from the back. This life-size Nāga undoubtedly must have been the object of worship itself, like most of the other Nāga cult-images from Mathura.

The question arises where such an image was placed – whether it was standing below a tree, in open ground or perhaps in a building erected as a temple. Do we have means to answer this question? Fortunately we have a number of inscriptions containing scraps of valuable informations on the matter concerned.

Bühler (Ind. Antiquary, XXV, p. 141 f.) reports a Kharoṣṭhī inscription, found in the Gandhara region, which records that a tank was caused to be made for the worship of all the Nāgas. The date of the inscription has been tentatively attributed to the first century BC.

Similar information can be drawn from an interesting relief in the Govt. Museum Mathura, hailing from Ral Bhadar, showing a Nāga with a seven-headed canopy accompanied by two Nāginīs, marked as such by a three-headed hood behind their shoulders. Below this scene, a group of five male and five female worshippers together with two children, all of completely human shape, are depicted (M. M. 210). The inscription at the base of this relief tells us that "*In the year 8 of mahārāja rājatirāja ṣāhi Kanikka* [Kaniṣka] … *a tank and a garden* [were caused to be made] *for the holy Nāga Bhūmo as the donation of* [so and so]" (Lüders 1961: § 102). Besides the inscription which dates the stone into the time of Kaniṣka II, the relief is of special interest in so far as it displays a scene of worship of a Nāgarāja by human beings, representing perhaps the donor and his family.

The information gathered from the two records just mentioned can fittingly be completed by a third inscription, incised on the back of the largest Nāga image of all (M.M.C 13) which has been found at Chargaon in Mathura District. This more than life-size figure (ht. 7 ft. 8 in.) contains on its back six lines of Brāhmī script, making it known that "*in the fortieth year of mahārāja rājatirāja Huviṣka*" two male worshippers by the name of Senahasti and Bhoṇḍaka "*set up both* [this] *Nāga at his own tank*". The record closes with the passage "*May the lord Nāga be pleased*" (Lüders 1961: § 137). It is to be dated to the second century AD. From these three inscriptions we come to know that it was usual to donate *puṣkariṇīs*, i.e. lotus tanks, and gardens for the Nāgas and that a Nāga image was set up at such a tank. There is nothing said of a building for the image or for cult purposes, so it may be concluded that in such cases a place of worship with tank, garden and image was thought sufficient.

The affair becomes still more interesting if we take into account two more inscriptions said to come from the Jamalpur mound in Mathura City. Although the contents of the records differ widely, they have to be read one beside the other. First, an inscription on a figureless stone slab, now in the State Museum Lucknow (E 5), should be introduced. It carries eight lines of script mentioning a number of names of donors from Mathura, who are said to have set up a stone slab at the *sthāna* of the holy lord of Nāgas, Dadhikarṇṇa by name (Lüders 1961: § 27). By the "stone slab" the inscription might mean a Nāga image again, but there are two other points that are of greater interest here: firstly we get to know the name of a local Nāgarāja, and secondly it is said that the stone slab was set up at the *sthāna* of this Dadhikarṇṇa. What is *sthāna* in this context? In general, the word can mean any place, spot, locality, abode, dwelling or house. With other words, one cannot prove from the inscription alone, whether *sthāna* stands for an open place or for a building. But here the second inscription from the Jamalpur mound comes in: it contains just one single line, written on a pillar base, now in the Indian Museum, Calcutta (M 2). It records that the pillar is the gift of Devila, the *dadhikarṇṇadevakulika* (Lüders 1961: § 34). Now, *devakula* means without any doubt "deity-house", that is naturally "temple". And a *devakulika* is nothing but the attendant, the priest at the temple, here the temple of the Nāgarāja Dadhikarṇṇa in Mathura.

There is reason to believe that two regions in Northern India were, in the early historical period, more prominent areas of Nāga worship than others, namely the District of Mathura as documented just now, and the heart of Bihar State around Rajagriha. While Mathura provided us with a large number of Nāga images and the expressive inscriptional records, the Bihar centre was, up to now, the only place where at least fragments of structural remains of a Nāga temple could be unearthed. Excavations in the environs of the famous circular brick structure, popularly known as the Maniyar Math, revealed that this structure rested upon at least two earlier strata of buildings, the oldest of which belongs, according to its bricks of the size 42 × 30 × 6.5 cm, to the second/first century BC (ASIAR 1935–6, p. 53; see also ASIAR 1905–6 and MASI, no. 58). Although it is not possible to get an idea of the ground-plan of the structures, the place provides us with finds of relevant interest. Beside terracotta figures of serpents, a group of terracotta cobra-hoods forming the necks of vessels have been found. But more instructive is a stone relief carved on both sides found in the area of the lower structure near Maniyar Math (ASIAR 1936–7, pp. 45ff., pl. XIIIa, b; cp. also H. K. Prasad 1960, p. 132). It shows in the lower panel of its reverse eight Nāga figures, standing side by side, and above it, behind a stone railing, an architectural structure with the remains of two niches. In the left niche a sitting Nāgī, who does not seem to have been the only figure in it, is preserved. The niche to the right contains only the canopy of another Nāga. On the top of these niches one more panel of standing figures had its place, with an inscription on its base, mentioning *homage to Mani-Nāga*, a famous figure of ancient Rajagriha. The obverse of the sculpture shows the remains of two standing Nāgas and a small accompanying figure. This relief is of spotted red sandstone and undoubtedly a work of a Mathura artist. The inscription and the style suggest a date of the second century AD. The relief contains the earliest depiction of a Nāga temple and shows it as a structure enclosed by a railing. Here the circle closes. There is no reason anymore to doubt the existence of prominent buildings for the worship of Nāgarājas as Nāgadevas in early historical times. The Apsidal Temple no. 2 at Sonkh is, in its upper phase, the best preserved archaeological evidence for this. The architectural design of this temple and the outstanding quality of the sculptures connected with it force us to reconsider our customary ideas of the Nāga cult as a mere folk-cult in primitive surroundings.

IV. CHRONOLOGY OF THE APSIDAL TEMPLE NO. 2

Whereas the main excavation presented the excavators with not less than fourty levels of habitation, the "island" with the remains of the Apsidal Temple no. 2 contains only a restricted number of horizons which were, to make matters worse, heavily mixed up by the haphazardly digging of pits and ditches by the peasants. The surface covers, as already mentioned, structural remains of the Kuṣāṇa times. The deepest structures, on the other hand, are the mud square in 6 III/Cc and the earliest brick construction of the Apsidal Tempel (see Plan, Phase 1, p. 416).

The mud structure is, on its western wall, combined with layers of baked bricks of the size 42.0 × 31.0 × 8.0 cm and stands no doubt in connection with the rectangular spot of floor in front, built of 45.0 × 24.0 × 7.0 cm large baked bricks.

Fortunately, the early structure of the Apsidal Temple no. 2 is of much more help to determine the date of its origin. The platform wall is built of baked bricks measuring 48.0 × 23.0 × 7.0 cm in average, the foundations of the Cella are laid of mud-bricks and erected in baked bricks, both of exactly the same size as those of the platform enclosure. The pillar foundations, on the other hand, consist of baked bricks of the average size of 42.0 × 29.0 × 7.0 cm. A third structural component of the earliest phase of the temple are the fragments of ten burnt roof-tiles (So III G 152–161), obviously of the lateral roof along the cella dome. All these three components, i.e. the 48.0 and 42.0 cm long baked bricks as well as the same type of roof-tiles appear in exactly this combination once and only in Level 27 in the main excavation field. Such a coincidence can only mean that Phase 1 of the Apsidal Temple no. 2 is contemporaneous with just that Sūryamitra Level and has to be dated into the beginning of the first century BC.

A fragment of wall touching the southeast corner of the "island", built of baked bricks of the size 40.0 × 26.0 × 6.0 cm, and layers of same sized bricks interspersed among the remains of walls of the monastery-like cell construction north of the temple, indicate a transitional building phase which, according to the scale of brick- sizes used at Sonkh, has to be dated into the Datta/Kṣatrapa period. The extent of the architectural activities in this time is, unfortunately, not reconstructable.

The upper phase of the temple and its surroundings is datable by 1) the size of bricks, 2) the stylistic features of finds and, 3) two specially located copper coins.

The size of bricks used for the structures belonging to the upper phase is 38 × 24 × 6 cm in average and complies with those of Sonkh Kuṣāṇa buildings in general. Directly belonging to this phase are the remains of the stone railing and the gateway, showing clear Kuṣāṇa features in their reliefs. Among the scanty remains of terracotta human figures were found a few heads (nos. 9–11) which correspond in style to finds of late Kṣatrapa and early Kuṣāṇa period in the main excavation. The remaining terracotta material shows mature Kuṣāṇa features. One seal (Misc.Terr.Obj., no. 1) carries two lines of Kuṣāṇa Brāhmī script.

All this evidence points to a Kuṣāṇa origin of the upper temple construction and adjacent architectural remains. But there is, fortunately, the more distinct find of two copper coins sticking together like a sandwich, discovered directly in the brick foundation of the second pillar from right in the northern row, i.e. exactly in 6 III 17.3/Cc 17.5 (Part II: Coins, nos. 2–3). They are issues of Wima Kadphises and Kaniṣka I and settle the date of the upper phase of Apsidal Temple no. 2 into the beginning of the Kaniṣka era. Except these specimens only four more Kuṣāṇa coins (nos. 1.4–6) have been recovered on the "island", among them the unique and important issue of a Huviṣka medal (no. 6), discussed in detail in its description.

The final fate of this place remains in the dark. There are no structures betraying a further use of the temple or its surroundings after the Kuṣāṇa period. A handful of coins, three Vīrasena, one Vināyakapāla I and one Bharatpur specimen are the only witnesses of later times buried in the sand of this small piece of land. It is not possible to know when the large, four-sided Nāga sculpture, once perhaps the cult image in the apse of the Apsidal Temple no. 2 and now housed in the modern shrine (Part II: Sculpt., no. 22), had been found and set up for worship, perhaps under a tree first, near its findspot. But it might have happened a long time ago so that the place was respected as a sort of sacred area all the time, abandoned by people, except at the moments of *pūjā*, as it is performed even nowadays every Friday.

V. THE FINDS

A. SCULPTURES OF THE GATE

Of the Southern Gate altogether ten carved stone fragments have been recovered, namely

a) the projecting ends of three architraves
b) the middle bottom lintel
c) the western bracket Śālabhañjikā
d) two intermediate square panels from the western pillar axle
e) one complete architectural lion from between the beams
f) two fragments of decorative screens

While the lion is sculptured in the round, all the other pieces are carved on the obverse and the reverse sides. The stone used is the well known mottled red sandstone of the Mathura sculptures. For the find-situation, the state of preservation and the reconstruction of the gate see above under STRUCTURES.

1. Projecting end of the upper architrave.

Obverse: The left end of the piece is nearly semicircular in shape, the right ends in a breakage. The front relief shows an elephant-headed Makara, a lotus bud in a triangular free space, and remains of a decorative panel on the right.

The elephant-headed Makara, facing right, is carrying a partially opened lotus blossom and a lotus bud in its uplifted trunk. The body of the animal is sensitively modelled in low relief with changes in depth of carving emphasizing the upper portion of the trunk and the bulbous nature of the head. The highest portion of the relief are on the same vertical plane as the flat frame. Both the tusks are visible, the one behind just showing its point. Above the small almond-shaped eye appears a band of incised vertical strokes around the crown of the elephants head. The bulk of flesh at the neck and the bulges of skin join into parallel folds. The ear is given as a thin piece of wrinkled flesh. Semicircles at the foot indicate the nail-beds. Wrinkles of the skin are marked by incised lines along the bottom and top of the trunk, under the lower lip and at the back of the leg. Near the ear is a vertical twisted double line stretching about three quarters the length of the ear, probably indicating the musk line.

The hindpart of the elephant ends in a crocodile's tail, set with regularly arranged scales, turning round and becoming smaller and smaller till the tail runs out in a fin, clapped together like tongs. The hindpart, in contrast to the forepart is extremely stylized and simply performs its function of providing the spiral motif for the end of the architrave.

To the right of the animal can be seen the remains of a highly stylized palmette design. A similar floral design appears on the reverse where slightly more of the pattern survives. Its height, not including the undecorated border, is about 19.5 cm while the distance from the centre of the palmette to the border is 10.5 cm. This makes the interior dimensions of the palmette panel ca 19.5 × 21.0 cm. These measurements are not exact for both the sides as there is almost a 1.0 cm difference, at various points, in the height of the obverse and that of the reverse.

The entire panel is placed within an undecorated border which does not strictly conform to the shape of the architrave but is following to some degree the outlines of the animal. Thus a space remains on the beam which is almost triangular. Within this space is a singular lotus bud, perhaps used as space-filler.

Reverse: The heavily mutilated reverse shows the same motifs as the obverse, the elephant, of course, facing left. The slight differences (direction of the lotus, of the spiral end etc.) need not be mentioned particularly. But it is remarkable that in this case the elephant seems to be more in three quarters profile showing a portion of the right ear, the double bumps on the head and the right leg. The design of the decorative panel is again slightly different from that on the obverse.

Top and bottom of the stone are heavily striated: on the top parallel striations, on the rounded end diagonal striations. The bottom is blank. On the right, in the centre of the palmette square corresponding with the intermediate cubic blocks, the stone shows a vertical perforation of a diameter of ca 7.0 cm, becoming narrower towards the middle. On top of the elephant relief is marked a rectangular indentation measuring 8.4 × 7.0 cm, necessary for the insertion of an architectural piece of decoration, here presumably a lion as no. 8. The distance between the centre of the perforated hole and the rectangular indentation amounts to ca 33.6 cm.

Size: L. 67.0 cm. H. 23.2 cm. D. 17.5 cm. Interior length of elephant relief 49.5 cm, interior height 18.5 cm. Mottled red sandstone.

No. So IV 39. FS. 6 III 4.0/Cc 2.3, H. 14.82 m.

2. Projecting end of the middle architrave.

Obverse: The obverse, that is the outer side of the gate, is in this case the much more mutilated side. As the reverse is in a better state of preservation, both the sides carved with the same motif will, for identification of details, better be compared simultaneously.

Both the sides show the figure of a fierce Makara. The beast has its jaws wide open, a man is boldly placing his right resp. left leg in the lower jaw of the animal. This man marks the end of the relief scene, because behind him a bordered square with a palmette design comparable to that of no. 1 is visible. The hindpart of the Makara is very much the same as that of the elephant relief: ending in the scale-set curled-up body of a fish-tailed crocodile which is in the obverse turning right and in the reverse left. Similar also is the triangular space with the lotus bud in it.

The Makara is shown as an aggressive ogre. The protruding eye under the sharp eyebrow, the puffing nostril and the erected ridge on the forehead create the fierce impression. The ear is shaped like a fin, on the cheek of the reverse Makara a round-edged *svastika* is incised. The skin above the upper jaw is heavily wrinkled. The visible leg of the reverse ogre shows a sharp claw and an almond-shaped mark on its thigh. Behind the leg and at the bottom of the body hairs are indicated by hatchings. The lower jaws rest firmly on the ground, in the reverse depicted with four vertical strokes. The open jaws show a complete set of sharp pointed teeth. In the obverse relief the tongue is halfways lifted while in the reverse it seems to rest in the lower jaw.

The male figure displays a cautious movement of entanglement with the beast. The right resp. left arm inflected, the other uplifted, he boldly steps into the open mouth. But the artist depicted the movement in quite different a way. In the obverse, the man places his right leg in a nearly right angle very cautiously just behind the lower teeth. The tongue of the Makara seems to touch his leg. In the reverse, the man has covered his lower leg with the tip of his garment and in a balanced action he courageously puts his outstretched leg between the jaws, just upon the tongue, as it seems. Unfortunately, the head of the male is damaged in both reliefs. Thus the nature of the man is not being disclosed in these representations. But no. 3 helps to identify the figure as a Nāga beyond any doubt.

Both the decorative panels are so heavily mutilated that a description is useless.

Top and bottom: The top side is striated in the direction from obverse to reverse and has one rectangular indentation of the size

9.0 × 6.2 cm in about the middle of the Makara relief, and a circular hole of a diameter of ca 7.0 cm. The distance between the centre of the perforated hole and the rectangular (for an architectural lion) amounts to ca. 39.0 cm. The bottom is plain except an incised groove marking the border line between relief and decorative panel.
Size: L. 71.0 cm. H. 22.5 cm. D. 19.0 cm. Interior length of Makara relief 57.2 cm, interior height 19.5 cm.
No. So IV 38. FS. 6 III 3.7/Cc 2.6, H. 14.73 m.

3. Projecting end of the bottom architrave.
Obverse: This fragment is of the same layout as the other rounded end-pieces of architraves described so far: A framed relief scene, a triangular space filled with a lotus bud, and (part of) a square decorative panel.
The relief shows a fierce Makara into whose mouth a male figure is stepping. The jaws of the beast are wide open, from the nostrils, waves of steam make their way above the wrinkled skin of the mouth and the erected ridge on the forehead. The seemingly dangerous-looking eye is deeply set, covered by a sharp edged eyebrow. The ear has the shape of a fin, the leg is provided with a powerful claw. At the back of his leg and under the body hatched bands indicate a hairy condition of the skin. The top of the head and the cheek show different incised marks: Above the eye a triangle with wavy sides, below the ear an additional undeveloped fin, directly on the cheek some sort of a threefoil symbol.
The hindpart is designed as a scale-set crocodiles tail which is turning in a spiral anticlockwise, ending in a slightly spread fin.
The man in front of the ogre is clad in a dhotī. His right arm inflected, the left uplifted, he steps far into the open mouth, filling the space in it. His face carries an expression of joy, it seems as if he is just a playmate of the Makara, although his movements are rather cautiously timed. Behind his head, a single cobra head appears, identifying him as a Nāga. The left hand shows the palm, there is nothing in his fingers which rest on a piece of uncut stone.
The relief represents the same motif as no. 2, but here the preservation is much better. In general, the carving is smoother than in its counterpart. Due to four centimetres more of space in the length, the Makara head is of longer proportions. But in comparison, some of the fierceness is lost by placing the eye in some sort of a cave instead of letting it wildly glare around, as in the preceding piece. The spiral of the tail is executed more skilfully, introducing a turning movement in about the middle of the length, thus changing the otherwise simple course of the curve.
There remains no doubt that the male figure in no. 2 is a Nāga, as is the case with the completely preserved male in this relief. And nowhere should one see a fight going on, the representation rather meaning a play scene between friendly beings.
Of the decorative panel only a few scrolls of the plant design are left. But this portion of panel has to be seen in connection with the long panel in no. 4 which it directly fits.
Reverse: The reverse of the piece is completely lost, nothing of the relief layer has been preserved. There is but little doubt that this side was decorated with a Makara motif very similar to that of the obverse.
Top and bottom: The top shows striations from front to back, the bottom is blank. On the top is a rectangular indentation of 6.0 × 8.0 cm for the insertion of the tenon of an architectural piece of decoration (lion), the bottom is marked with a deepened square of 8.8 × 10.0 cm and an indented area of 25.0 × 15.3 cm for the attachment of the bracket figure (no. 5). The portion of the decorative panel is vertically pierced by a hole of 5.2 cm diameter in a distance of ca 34.0 cm from the centre of the upper indentation, and of 44.0 cm from the lower one.
Size: L. 72.6 cm. H. 22.2 cm. D. 16.4–17.2 cm (reverse cracked off). Interior length of Makara relief 61.5 cm, interior height 18.5 cm.
No. So IV 37. FS. 6 III 4.0/Cc 3.1, H. 14.77 m.

4. Middle lintel of the bottom architrave.
The lintel terminates on both ends in the damaged portion of the decorative panels connecting it with the rounded Makara end-pieces the left one of which is preserved (no. 3) and fits the left breakage of the beam perfectly. A fragment of at least the reverse of the right end-piece had been recovered prior to the excavation and was published by Czuma/Morris, 1985, p. 62, no. 10 (cp. chapter II, STRUCTURES).
Obverse: To the left and right of the extensive relief remains of the connecting decorative panels are visible which presumably showed the same palmette pattern as preserved on the left side and its supplement to the right of the left end-piece (no. 3). These square panels are pierced with a round hole at the place where they rested on the jamb of the doorway.
The large middle relief is counting not less than nineteen figures, among them four women. In the centre of the scene are sitting a Nāgarāja and a Nāginī. To the right two female servants carry the royal emblems: a chowrie and an umbrella. Both are characterized as Nāginīs by a single snake-hood rising behind the head. The three male persons on the same side are likewise marked as Nāgas by similar snake-hoods, all of them clad in a dhotī and with the hands in añjali. The last Nāga attendant in the scene is the girl standing beside the seated Nāginī: she holds a necklace, just handed over to her by her mistress with the order to make it a present to the leader of a visiting group appearing on the left side of the relief. The members of this group are no Nāgas because none of them is provided with a snake-hood and all are differently dressed proving them as strangers which form a delegation consisting of three Brāhmaṇas, four young men (ascetics or disciples) and four children. The second Brāhmaṇa holds a flask by its handle, the men behind him raise the hands in añjali. The Nāgarāja is sitting on an intentionally displaced throne in a clearly tilted position, with his left leg free of the footrest and the seven-headed cobra-hood out of centre. In his pot-bellied placidity he looks like a drunk. His hands grasp a garland or piece of cloth which stretches from the tallest of the children via the hands of the leader of the delegation and the left hand of the Nāginī directly to him.
The Nāginī to the right hand side of the Nāgarāja is depicted as if not the Nāga king but she herself would be the commanding person in the scene. She sits with legs apart, the feet placed on a footrest and with an orderly folded piece of cloth between the legs on a stool. Behind her head raises a seven-headed cobra-hood. With a haughty gesture she is, as already mentioned, handing over with her right hand a piece of jewelry to her servant to pass it on to the first Brāhmaṇa.
In a previous publication (Härtel, 1976, p. 98) the author made a few remarks on the position and possible identity of the Nāginī just described which may be repeated here: Normally, in Indian art a Nāga queen is placed to the left of the Nāgarāja, is smaller in size, and has two cobras less in her canopy than the ruler. Here, the Nāginī shows the same number of snake heads in her hood, sits to the right of the Nāgarāja, and is as tall as he. Since she, in addition, behaves like the commanding person, she may not be Vāsuki's queen at all. The relevant literature seems to offer only one name fitting the situation of a female Nāga with the powers of a king: Jaratkāru, the sister of the Nāgarāja Vāsuki.
This Nāga panel has been discussed already by R. C. Sharma, 1984, pp. 86f., fig. 9, and studied thoroughly by S. P. Tewari, 1986, pp. 523–532. Starting from the author's reference to Jaratkāru S. P. Tewari brings the

scene in connection with the story of Āstīka as narrated in the Āstīka parvan of the Mahābhārata and identifies the tallest of the children as Āstīka, the Nāginī as his mother Jaratkāru and, of course, the Nāgarāja as Vāsuki. While the author and R. C. Sharma were of the opinion that the garland resp. piece of cloth is being given as a present to the king, S. P. Tewari sees it the other way round and interprets it as an act of snatching the uttarīya from the Nāgarāja, which is, according to him, confirmed by the tilt in the position of the king on account of which his left leg is shown free of the footrest. This snatching away of the upper garment is to be understood as the act of pūrṇa-pātra performed when a good news was to be celebrated. Here the good news was that the brave deed of Āstīka finally saved the Nāga race from destruction by king Janamejaya.

This interpretation is tempting, especially because S. P. Tewari seems to have all the answers as to the presence of the delegation including the group of children. But there are a few points which do not really fit the story. If the tallest boy is Āstīka in the act of snatching the upper garment from Vāsuki one would expect him in a position of dragging the cloth himself, but he is not even touching it because his hands are supporting a basket in which the cloth (or garland) lies. The linear pattern of the basket which reaches up to the right thigh of the leading Brāhmaṇa is clearly visible underneath. Secondly, the handing over of a piece of jewelry to the first Brāhmaṇa would be better understood as a present given in return for another. In case the cloth (or garland) is being presented to the king the return present would be handed over after finishing this first act of presentation. S. P. Tewari sees the Brāhmaṇa holding a bowl "filled with jewels and on top of which still a necklace is being placed by the Nāga maid". This is not so, the left hand of him is clearly supporting the cloth (or garland), and what Tewari interpretes as a bowl are the bulgy folds of the garment on his left upper arm. Thirdly, as will be seen later, terracotta moulds taken directly from the group of children in this relief do not show Āstīka, the hero of this story, but the smaller children behind him (Terr. Fig. nos. 1–3). These points have to be accounted for if one is inclined to accept Tewari's interpretation.

The artistic quality of the relief is remarkable. The nineteen actors have been skilfully distributed over the long-stretched frieze. In the centre the main figures who are the most active participants in the scene. To the right the servants of the Nāga court. On the left side the visiting delegation whose members are depicted in varying tallness. Below, the group of children, shown as standing lined up according to their size and thus being a touching sight. The piece of cloth (or garland) crossing part of the scenery brings a countermovement into the strongly vertical adjustment of the actors in the relief. The artist took pains to give the faces an individual expression as to be seen with the Nāgarāja, the Nāginī, and the members of the delegation.

Reverse: Unfortunately, the reverse is for the most part corroded. Only some contours and a few remnants of human figures are preserved. The field of the relief was, as on the obverse side, separated from the adjoining panels with now totally damaged floral design to the right and left by plain bands.

Once the reverse relief contained thirteen figures. One of them is completely gone, the others are more or less preserved in outlines. Six persons each are walking in procession from the right and the left towards a central figure which is standing frontal with the right hand raised and a flask in the lowered left.

To judge from the garments, all the figures depict male persons clad in dhotīs with large scarf arranged in the same way as to be seen with the three Nāga court servants on the right side of the obverse. It is not possible to decide whether these men where provided with a cobra on their head. At least three figures of the group on the right hold a large vessel (with lid?) with their hands. The two men standing directly on the sides of the central figure seem, according to their position and movement, to perform a special duty (carrying chowrie, umbrella?). Unfortunately, the head of the main figure is also lost, but there is sufficient reason to assume that a mould (Terr. Fig. no. 4) found together with those of the group of children taken from the obverse represents the head of this central person which by the remains of a cobra-hood could then be identified as a Nāga of higher rank, presumably as Nāgarāja.

Top and bottom: On top, seven indentations of different shapes in the sequence octagonal, small rectangular, octagonal, long rectangular, octagonal, small rectangular and octagonal are visible, completed by two fragmentary holes. The bottom shows remains only of these vertical holes in the palmette fields. The purpose of the indentations on top of the middle lintel is no doubt to insert decorative architectural pieces filling the space between the beams.

Size: L. 128 cm. H. 22.1 cm. D. 16.4 cm. Interior length of Nāga relief 101 cm, interior height 18.5 cm.

No. So IV 36. FS. 6 III 3.2/Cc 2.9, H. H. 14.73 m.

5. Toraṇa bracket with Śālabhañjikā figures.

The find spot and the curved shape of the sculpture denotes that it is the western bracket stone from the southern gate. It was carved on both sides with the figure of a Śālabhañjikā of which the reverse one is preserved only in contours.

Obverse: The Śālabhañjikā is shown under a flowering *aśoka* tree, balancing with her feet on the back of a crouching dwarf whose facial expression is one of the utmost joy. Her right arm is raised touching a branch of the tree and the other arm resting on her hip. She stands with her right leg crossing over the left and with the hip, on which the arm rests, thrust out. With the exception of a fracture line in the height of the lower legs the figure of the Śālabhañjikā is well preserved. She is giving the impression of being nude, but the drapery folds on her left side indicate that she is wearing a diaphanous lower garment. The hair is arranged in tight strands except a circular space filled with a decorative bunch of hair. She is adorned with large pendant ear-rings, a precious pearl-necklace (*ekāvalī*), ornamented arm-rings and numerous bangles on the lower arms and legs. The anklets have the shape of a snake with a seven-headed canopy. Her girdle is made of four rows of discs, each row suspended over the one below it and ending in a rounded lotus-adorned belt buckle tied together by a knotted ribbon. Directly above the girdle a string of the diaphanous garment is clearly marked.

Reverse: The back of the bracket was carved with a mirror image of the obverse Śālabhañjikā but is preserved in its outlines only showing her grasping the tree with the left hand and resting accordingly the bent right arm on her hip. She stands with her left leg crossing over the right and her foot poised. This pose is not necessarily to be interpreted as *aśokadohada* because the alternating position of the legs is, like that of the whole figure, conditioned by the curved shape of the bracket stone.

On *top and bottom* the bracket stone ends in a 2.8–3.0 cm thick slab which obviously was directly inserted in the lowest architrave resp. in the pillar of the toraṇa, because no tenon is traceable.

Size: Utmost height 77.6 cm. B. top 25.2 cm, bottom 26.4 cm. D. top 15.3 cm, bottom 15.5 cm.

No. So IV 27. FS. 6 III 0.3/Cc 1.7, H. 14.61 m.

6. Square block, separating the architraves from each other.

Of the western cube, presumably between the lower and the middle lintel one of the two relief sides is preserved. It shows two three-headed cobras with the bodies intertwined. The tails of the snakes are twisted spirally, and in the lower part the skin is marked with small incised circles. Where the bodies become tripartite, the snakes show their breast, the skin-folds indicated by

horizontal striations. The middle body is made stronger, showing a blown cobra-hood. The other two heads are turned inwards, their split tongues are darting out. The space between the hoods is occupied by a lotus bud. On all the four sides the relief was framed by a plain, 2.0 cm broad border, the left one of which is damaged. The relief on the reverse of this block is completely broken away till to the vertical hole of 7.2 cm diameter, perforating the stone from top to bottom.
Size: 21.6 × 21.3 × (damaged) 13.0 cm
No. So IV 28. FS. 6 III 0.1/Cc 1.8, H. 14.61 m.

7. Square block, separating the architraves from each other.
The second architectural cube found in addition to no.6 is carved on both sides with fanciful palmette patterns. From a floral bundle knotted around a vertical axle formed by two veined blades emerge numerous long leaves winding up and down and combining each other with their curled tips. This pattern, developed from nāgapuṣpa motifs, is improved by an alternating lining of the leaves.
The design on the back looks quite similar but shows a lotus rosette instead of the floral bundle in the centre of the relief.
Both carvings are framed by a plain border of ca 2.0 cm width. The upper and lower side of the block is striated from relief to relief. A round hole of ca 6.0 cm diameter perforates the stone from top to bottom.
Size: 21.0 × 20.8 × 17.0 cm.
No. So IV 35. FS. 6 III 6.0/Cc 0.6, H. 14.82 m.

8. Architectural Lion.
The animal is conceived in the round and placed on a flat base under which a tenon is projecting. Seated on the hind legs the lion is stemming his forelegs against the ground and opening his mouth in a roar. The head is intentionally flattened from the ears to the muzzle in order to fit the piece between two beams of the toraṇa. Both the bulgy cheekbones are marked with incised floral (or stylized sun) motifs consisting of three S-shaped lines crossing each other in the centre. The half-open mouth shows a tooth each to the left and the right; muzzle-hair is indicated by horizontal strokes. A long mane, marked by slightly curved incised lines, covers the back of the head and the front of the neck. The forelegs show scratched marks of hair above the paws.
Size: L. 23.5 cm. H. (without tenon) 21.4 cm. D. 11.2 cm. The tenon projects 2.8 cm from the base and measures 8.0 × 5.2 cm.
No. So IV 29. FS. 6 III 0.3/Cc 2.25, H. 14.55 m.

a) Rear part of a lion seated on his hind legs framed by bristling hair. The animal is placed on a flat base with part of a tenon underneath.
Size: 14.0 × 6.8 × 8.1 cm.
No. So IV 183. FS. 6 IV 7.62/Cc 13.33, H. 15.53 m.

9. Fragment of a perforated double-sided architectural screen.
Two four-petalled lotus flowers marked with lenticular incisions along the edge of the leaves are arranged in such a way that a third motif of a circle consisting of two petals of each flower touching each other is formed. Along and around the petals the stone is perforated and ground. The motif is framed by a plain border-band, the (opposite) sides being 1.2 and 2.4 cm wide.
It needs a second, now missing, half to complete the screen which would measure ca 15.1 × 20.0 × 2.5 cm, the wider border-band becoming inserted in the respective indentation on top (and bottom) of the architraves.
Size: 15.2 × 10.4 × 3.2 cm.
No. So IV 64. FS. 6 III Cb/Cc.

10. Fragment of a perforated architectural screen.
Nearly identical carving as before, consisting of two four-petalled lotus flowers in plain border. The piece does not fit no.9.
Size: 16.8 × 10.2 × 3.0 cm.
No. So IV 43. FS. 6 III 1.9/Cc 1.0, H. 14.50 m.

B. MISCELLANEOUS STONE SCULPTURES

In the area adjoining the Apsidal Temple 2 eleven fragments of mostly smaller sculptures and architectural pieces were recovered. In addition, five mostly fragmentary larger images have to be listed which were found here prior to the excavation and could be located either in the Mathura Museum, in private possession or, as the Nāga image in worship as Cāmardevī, on the site (nos. 20–24).

11. Fragment of a relief carved on two sides.
Obverse: Upper part of a Yakṣī raising her arms and pressing the palms of the hands against the framing wall. Her head is slightly tilted, the hair is arranged in flat strands. Large ear-rings, a broad collar, and a number of bangles on the lower arms adorn the body.
Reverse: Right side of a female turned left under a tree. Presumably in a Śālabhañjikā position. The right arm is held akimbo, behind it appears a twig of tree. Face and head of the girl are strongly mutilated preserving just the right eye, part of the forehead and the hair-dress.
Size: 8.5 × 8.2 × 7.5 cm.
No. So IV 289. FS. 6 IV 11.46/Cd 6.30, H. 14.55 m.

12. Fragment of a relief. A man is standing in front of a *caitya* with his right arm raised, the mutilated hand turned inwards. His left arm is broken off. The man is clad in a dhotī which is gathered around the hips and tied into a knot on his left side; another part of the garment is arranged in folds hanging down between the legs. Face and chest are very much worn.
Between the raised arm and the plain border of the relief stands a pillar with ornamental capital. Amidst the head of the figure and the capital remains a thick part of an obviously split arch which might be the remnants of a Nāga hood. In the background towers the dome of a *caitya* topped by a *harmikā* (?) or part of a railing. On the right side of the dome a scratched curved band is visible the meaning of which remains unclear.
Size: 23.0 × 10.5 × 5.0 cm.
No. So IV 33. FS. 6 III 5.6/Cc 0.6, H. 15.41 m.

13. Lower part of a male figure, split off from a relief. Body from hips to ankles, clad in a dhotī gathered around hips and knotted on the right side. Other parts of the garment are hanging down on the left hip and between the legs. To the left and perhaps also to the right of the lower legs a small figure seems to stand with the arm raised to the folded end of the garment.
Size: H. 11.5 cm.
No. So IV 62. FS. 6 III Cb/Cc.

14. Fragment of a relief showing the feet of a human figure standing on a pedestal decorated with the railing pattern. Between the legs hangs the tasseled end of the garment. To the right of the railing appear the blurred remains of either a seated Nāga figure or of a theriomorphic Nāga with spread hood under a tree (?).
Size: 10.6 × 12.4 cm.
No. So IV 384. FS. 6 III 3.62/Cc 9.60, H. 14.66 m.

15. Fragment of a relief with a blurred female figure, perhaps seated, the right arm lowered. Above her head the remains of a Nāga hood.
Size: H. 19.9 cm.
No. So IV 56. FS. 6 III Cb/Cc.

16. Fragment of a relief showing a standing Nāga. Contrary to the common depiction of semi-theriomorphic Nāgas this one has an animal upper body whereas the lower part is human. Even so, the snake-shaped head is provided with a human ear adorned with an ear-ring. On the neck and chest horizontal folds of the snake-skin are recognizable. From the shoulder appears an arm holding in its hand something like a book, the cover of which is decorated with a rhombus pattern. The pot-bellied figure stands on rather unsafe legs with slightly bent knees. Traces of a garment are recognizable from the hip to the loin. Towards right the relief is broken off, on the left the Nāga leans against an architectural upright (pillar?) behind which remnants of the plain border of the relief are visible.
Size: 18.0 × 9.5 × 6.7 cm.
No. So IV 327. FS. 6 IV 9.14/Cc 19.48, H. 14.69 m.

17. Upper part of a Nāginī with the right arm raised, the hand turned inwards. A bar, decorated with incised strokes on the outside, connects the back of the hand with the background. The lower body is broken off below the breast. The figure is adorned with long ear-rings, a collar, and a bracelet combined with a number of bangles. On the left shoulder a piece of shawl is preserved. The hair is combed towards the sides, crossed in the middle by a vertically arranged strand of hair. Behind the shoulders and the head a hood consisting of three cobras blows up like a nimbus showing the skin-folds of the chest of the two outer snakes. One of the cobra heads is broken off, the middle one shows a reliefed rosette on top of its hood.
At the back of the head the three bodies of the cobras stand up, marked with incised circles. In the height of the left shoulder of the Nāginī remains of two horizontally winding coils are visible.
Size: 16.6 × 10.9 × 5.3 cm.
No. So IV 360. FS. 6 IV 15.35/Cc 13.6, H. 14.62 m.

18. Fragment of a Nāga hood. Preserved is one head only with a carved *cakra* symbol on top of its blown up hood.
Size: 3.2 × 5.2 × 2.7 cm.
No. So IV 307. FS. 6 IV 18.38/Cc 16.75, H. 14.91 m.

19. Upper part of a defaced big Nāga image. Recognizable are the outlines of ear-rings and the horizontal skinfolds of the chests of snakes. The hood consisted undoubtedly of seven cobras. The back is worn.
Size: 46.0 × 56.0 × 25.0 cm.
No. So IV 94. FS. Surface find.

20. Plinth with corroded remains of a free-standing image. On the back a piece of a snake's coil is preserved. The plinth itself is roughly hewn. The sculpture was set up close to the northern entrance.
Size: 24.0 × 19.0 × 9.0 cm.
No. So IV 73. FS. 6 IV 13.7/Cb 18.95, H. 15.16 m.

21. Fragment of an octagonal pillar with plain sides. The pillar was standing in the north east corner of the temple area.
Size: H. 49.0 cm. Diam. 14.0 cm.
No. So IV 390. FS. 6 IV 14.25/Cc 18.9, H. 14.82 m.

22. Four-sided Nāga image, in worship on the site of the Apsidal Temple 2 as Cāmardevī (Cāmuṇḍā). The obverse and the reverse show mirror-like the figure of a Nāgarāja with the right arm raised, its hand turned inwards *(vyāvṛtta mudrā)*. The slightly bent left arm is lowered to the thigh holding a flask (?). Behind his shoulders and head arises a seven-headed cobra-hood. To the sides of the right and the left arm the horizontally striated chests of the snakes are recognizable. All other details are totally worn away. The legs are broken off. Whith the stumps of the thighs the figure is inserted in the floor of the modern temple in which it is now housed and worshipped by the villagers.
The reverse shows, as already mentioned, a mirror image of the obverse one, being even more corroded.
On the narrow sides of the image theriomorphic Nāga-hoods are rising, showing the horizontally striated front of seven cobra bodies before which three stalks with lotus buds become visible. Three of the cobra heads are preserved on each of the sides, those on the right displaying their split tongues.
The horizontal cut in the lower part has presumably been made by the people installing the image in the temple or has been caused by some previous action.
This is, to the knowledge of the author, the only four-sided Nāga image of the early period of Indian art.
Size: Height from top to inserted bottom 143 cm. Upper width 102 cm, in the line of the thighs 90.0 cm. Depth from the obverse forehead to that of the reverse 35.0 cm.

23. Fragment of a tympanum originally placed above the doorway leading to the temple. The piece is carved on both sides.
Obverse: Below a broad and slightly curved tier ornamented with a creeper design an aquatic scene is depicted showing a Makara who is hunting another animal. In the corner above the tier rises a mountain landscape with steeply amassed rocks. In it a man is climbing upwards who is enclasped by a three-headed cobra the hood of which towers up behind his head. He is not fighting the snake, it belongs to him: he is a Nāga. He might be depicted as leaving the netherworld situated below the mountains.
Reverse: On the other side an exact copy of the obverse scene is depicted showing traces of a second tier below the figure of the Makara.
Both relief sides are framed by a plain border. On the right and left sides the stone ends in a broad flattened edge necessary for the insertion of the tympanum in the door frame.
The piece had been located in the possession of a villager. It could be acquired for the Govt. Museum Mathura.
Size: 47.0 × 26.0 × 6.0 cm. Mottled red sandstone.

24. Torso of a standing Nāga. The sculpture is conceived in the round, head, right arm, left hand and feet are missing. The right arm was raised above the head, most probably touching the cobra-hood. The left arm is bent towards the breast, its hand must have held a cup. The body displays a slight bend to the left with the hip thrust out, giving the figure an elegant swerve. It is clad in a dhotī and a scarf tied round the loins which terminates in a bulgy loop. Traces of a necklace can be seen on the breast. Under the arms and to the sides of the waist remains of the snake's coils are preserved.
The torso is of the type of the Chargaon Nāga and other comparable Nāga figures. It has been found in the fields near to Apsidal Temple 2 in 1963 and is displayed in the garden gallery of the Govt.Museum Mathura (no. 63.5, cp. Srivastava/Misra 1973, p. 65, no. 224).
Size: Ht. 125 cm. Mottled red sandstone.

25. Fragment of a large standing Nāga figure, preserved from the thighs to the ankles only. A loop of the garment falls down over the right leg while another end of it hangs along the left. A roundish spot of breakage in the height of the left knee betrays the place

of the water flask in the left hand of the Nāga. To the sides of the feet stands one Nāga adorant each, identifiable by a hood of a single cobra behind the head, and the hands held in añjali. The back of the figure is slightly rounded with no traces of carving.
The fragment has been found in the fields between the main excavation area and the Apsidal Temple 2 at 4 III/Cc. It has been handed over to the Govt.Museum Mathura.
Size: 41.0 × 53.0 × 29.0 cm. Mottled red sandstone.

26. Hip-part of a standing figure with traces of the knotted garment and its ends hanging down between the legs and on the right thigh. Back unmodelled.
The fragment has been found in the fields between the main excavation area and the Apsidal Temple 2 at 4 III/Cc. It has been handed over to the Govt.Museum Mathura.
Size: 20.5 × 21.0 × 5.5 cm. Mottled red sandstone.

C. SCULPTURES OF THE RAILING

Of the stone railing enclosing the area of the Apsidal Temple no. 2 at Sonkh in ancient times one hundred six pieces and fragments have been unearthed of which, unfortunately, more than two thirds are tiny and insignificant fragments of cross-bars. The twenty-nine (plus five) specimens depicted and described here stand for the whole spectrum of the architectural forms and artistic patterns of the railing. These pieces are listed in the sequence pillar (*stambha*), cross-bar (*sūcī*), and coping-stone (*uṣṇīṣa*).

1) Pillars

27. Upper half of a railing pillar (*vedikā stambha*) with the remains of a tenon on top. On the obverse and reverse the pillar is triply fluted vertically so as to give it, notwithstanding the sides with the mortices, a hexagonal appearance.
Obverse: The pillar is in its upper field decorated with a half lotus rosette below a 2.4 cm high plain topping band. The rosette shows four broad curved but slightly pointed petals with three sepals in between. Its centre consists of half of the disc-shaped gynoecium and the oblique ring of the androecium with thirteen anther lobes. To the sides a lotus bud fills the space between the rosette and the edge of the pillar.
The full medallion contains the figure of a Nāgarāja with a canopy of seven cobra heads. The hand of the uplifted right arm holds three lotus stalks, that of the left arm is held in height of the hip and was presumably carrying a now indefinite object. The lower body of the figure runs out in a striated snake's tail. The Nāgarāja wears a turban with a tall cockade and is, so far as preserved, adorned with large ear-rings, a collar, and armlets as well as bracelets.
The background of the medallion is filled with a lotus rosette of long pointed petals with sepals in between. One lotus bud each is placed in the corners between the round of the medallion and the edges of the pillar.
Reverse: The other side is decorated with a half lotus rosette on top and a full one below. The half rosette consists of four broad curved petals with sepals in between. The middle disc is divided into quadrants by an incised cross. Two lotus buds appear in the spandrels.
The full rosette has a corolla of eight petals with sepals between the tips. The middle disc of the gynoecium is surrounded by the ring of the anther lobes of the androecium. Four lotus buds fill the spandrels of the medallion.
The left and right sides of the pillar show one full 22.0 cm long mortise and the tip of a second one below. The distance between the two is 13.0 cm.
Size: 53.0 × 23.0 × 14.5 cm. Height of tenon 3.5 cm.
No. So IV 2. FS. 6 III 1.8/Cb 17.0, H. 15.00 m.

28. One side of a lengthwise split railing pillar. It is triply fluted like no. 27 and decorated with a half lotus each on top and bottom and a central lotus rosette. On top appears a plain stripe for fitting the coping-stone.
The upper half rosette has pointed petals with middle rib alternating with groups of seven sepals each. The disc of the gynoecium is divided into quadrants in which one anther lobe each is turned inwards. Two buds fill the spandrels.
The central rosette has a corolla of eight petals of the same shape as the half rosette above, but now with an incised border line. Between the tips of the petals appear again seven pointed sepals. The inner circle shows eight anther lobes with pricked tips. The disc in the middle represents the gynoecium. Four lotus buds fill the spandrels.
The remaining part of the bottom half rosette shows broad pointed petals with a middle rib and damaged sets of sepals in between. Two lotus buds fill the spandrels. In the centre of the rosette appear the heads of three cobras, the middle one shown frontal, the others slightly in profile.
Size: 75.0 × 17.5 × 5.5 cm.
No. So IV 40. FS. 6 III 19.0/Cb 2.1, H. 14.75 m.

29. Fragment of a triply fluted railing pillar with a half rosette on both sides. The better preserved side shows six slightly pointed petals of alternating design and with a set of three sepals each between the tips. The inclined androecium has fourteen anther lobes in the half rosette. The raised gynoecium is flat with a central prick and incised border line. Two lotus buds fill the spandrels. On top a plain stripe and a tenon for fixing the coping-stone.
The other side is crusty. The half rosette below the plain edge consists of four broad rounded petals with sepals in between. Six anther lobes are turned towards the gynoecium. Two lotus buds are filling the spandrels.
Size: 29.0 × 20.8 × 14.4 cm.
No. So IV 17. FS. 6 III 1.8/Cb 18.5, H. 14.85 m.

30. Two fragmentary fluted pillars with three plain cross-bars from the north-east corner (6 IV Cc/Cd) of the temple area. This part of railing is of much more simple design than all the other remains of pillars and cross-bars found in the surroundings. There is no middle medallion and the *sūcīs* are completely plain. The upper half rosettes on the *stambhas* of this reconstructed part of railing are restored.
Size: Pillars 86.0 × 19.5 × 16.0 cm. Cross-bars 30.3 × 18.0 × 4.8 cm.
No. So IV 287; 288; 294; 296; 308. FS. 6 IV 11.45–13.50/Cc 19.70-Cd 0.15–0.20, H. 15.15–15.30 m.
Note: One more fragment of pillar under So IV 299, 6 IV 12.2/Cc 19.75.

2) Cross-bars

Most of the cross-bars have been found to the south of the Apsidal Temple. All of them are carved with a lotus rosette in a medallion on both sides, but none is adorned with lotus buds in the space of the spandrels (nos. 31–40). It is, therefore, striking that nearly all of the pieces found (in admittedly lower number) in 6 IV Cb/Cc show exactly this filling of the spandrels (nos. 41–45). Two pieces, having oblique sides, belonged to staircase-railings (nos. 46–47). In a special spot to the north-east of the temple a group of completely plain cross-bars were recovered (nos. 48–49), fitting to a likewise simple type of pillars (no. 30; cp. STRUCTURES).

31. Cross-bar.
Side A
Medallion showing a corolla of eight petals with pointed tips, incised middle ribs and borderlines. Three sepals, one big and two small, alternate between the petals. The androecium consists of thirty-one thin anther lobes. The raised small disc of the gynoecium is flat with central prick and incised borderline.
Side B
Eight-petalled lotus design. The heart-shaped and bordered petals alternate with single sepals. Deep cut lines of a cross divide the gynoecium into quadrants which again are subdivided into octants, each forming an anther lobe.
Size: max. 30.5 × 21.5 × 5.5 cm.
No. So IV 3. FS. 6 III 1.8/Cb 17.0, H. 15.00 m.

32. Cross-bar.
Side A
Medallion with a corolla of eight broad curved petals and sepals in between. The petals show an incised middle rib and borderline. A deep cut cross divides the gynoecium into quadrants which again are subdivided into eight octants, each forming an anther lobe.
Side B
Rare type of lotus rosette consisting of four broad curved and bordered petals alternating with groups of seven to ten sepals. The central gynoecium and androecium is carelessly incised. A large deep-cut cross covers the whole medallion.
Size: max. 28.5 × 21.5 × 4.0 cm
No. So IV 4. FS. 6 III 2.75/Cb 12.35, H. 15.09–14.85 m.

33. Cross-bar.
Side A
Eight-petalled lotus with three-pointed sepals between its tips. The petals are slightly pointed and bordered. The gynoecium is encircled by eight anther lobes.
Side B
Weather-worn surface with an eight-petalled lotus design exactly like on side B of no. 31.
Size: max. 26.5 × 21.0 × 5.0 cm.
No. So IV 5. FS. 6 III 2.35/Cb 15.15, H. 14.80 m.

34. Cross-bar.
Side A
Medallion with eight heart-shaped petals alternating with sepals in between them. The middle disc shows the gynoecium with its styles and stigmas.
Side B
Medallion with a corolla of eight pointed petals alternating with three-tipped sepals. The petals are marked with an incised middle rib and borderline. The inner ring consists of twenty-four anther lobes encircling the raised gynoecium.
Size: max. 29.0 × 21.0 × 5.5 cm.
No. So IV 7. FS. 6 III 0.75/Cb 11.4, H. 14.57 m.

35. Cross-bar.
Side A
Eight-petalled lotus design. The petals of the corolla are long and pointed and marked with incised middle rib and borderline. Three sepals each, one long and two small, appear between the tips. The raised gynoecium is encircled by a ring of twenty-four anther lobes.
Side B
A corolla of eight heart-shaped and bordered petals with a sepal between them. The deep-cut lines of a cross divide the gynoecium in quadrants, each one representing an anther lobe.
Size: max. 31.5 × 21.5 × 5.5 cm.
No. So IV 18. FS. 6 III 1.95/Cb 18.4, H. 14.70 m.

36. Cross-bar.
Side A
Medallion showing a corolla of eight lotus petals and sepals in between. The petals have broad tips and are marked with a borderline and a middle rib with curved top. An incised cross divides the central disc in quadrants in each of which two anther lobes are turned inwards.
Side B
The medallion is carved with an eight-petalled lotus and three-pointed sepals in between. The petals are slightly pointed and marked with incised middle rib and borderline. The androecium consists of twenty-four anther lobes surrounding the raised gynoecium.
Size: max. 31.5 × 22.5 × 5.3 cm.
No. So IV 19. FS. 6 III 2.25/Cb 18.35, H. 14.70 m.

37. Cross-bar.
Side A
Medallion with a corolla of eight broad and pointed petals and sepals in between. The petals are marked with an incised middle rib and a borderline. A ring of twenty-six anther lobes surrounds the raised gynoecium.
Side B
The corolla consists of eight petals marked with heart-shaped incisions. Between the tips appear three sepals. The disc in the middle is divided into quadrants by a cross fringed with filaments. Each quadrant shows two anther lobes.
Size: max. 30.0 × 21.5 × 5.5 cm.
No. So IV 20. FS. 6 III 1.9/Cb 17.4, H. 14.75 m.

38. Cross-bar.
Side A
Medallion with an eight-petalled lotus rosette. The petals are broad, slightly pointed and marked with borderline and three-rayed notch. One large and two small sepals each appear between the tips of the petals. The ring around the gynoecium shows the anther lobes and filaments arranged in the form of spirals.
Side B
Corolla of eight broad curved petals marked with incised borderline and middle rib. Between the petals appears one sepal each. The central disc is weather-worn but seems to be similar in design with side B of no. 37.
Size: max. 27.5 × 20.5 × 4.1 cm.
No. So IV 22. FS. 6 III 0.15/Cb 12.95, H. 14.55 m.

39. Cross-bar.
Side A
Medallion with a corolla of eight lotus petals provided with middle rib and borderline. Three sepals, one long two small, appear between the tips of the petals. Twenty-four anther lobes form a ring around the raised gynoecium.
Side B
Defaced.
Size max. 28.0 × 20.5 × 4.5 cm.
No. So IV 31. FS. 6 III 2.7/Ca 2.1, H. 15.05 m.

40. Fragment of a cross-bar.
Side A
Medallion carved with a corolla of eight pointed petals with middle rib but no borderline. Groups of seven sepals fill the space between the tips of the petals. A stylized broad cross divides the central disc into quadrants each of which shows two in-turned anther lobes.
Side B
Medallion with a rosette of four very broad and ribbed petals alternating with sepals. The large middle disc shows the gynoecium with its stylized styles and stigmas.
Size: max. 25.0 × 19.5 × 6.0 cm.
No. So IV 74. FS. 6 IV 3.68/Cc 4.8, H. 14.84 m.

41. Fragment of a cross-bar.
Side A
Medallion showing a corolla of eight broad and curved petals incised with middle rib and borderline. The central disc depicts the gynoecium with its stylized styles and stigmas. The spandrels of the medallion are filled with lotus buds consisting of two petals and sepals in between.
Side B
Eight-petalled corolla. Sepals between the broad and rounded petals. A stylized broad cross divides the central disc into quadrants each of which shows two in-turned anther lobes.
Size: max. 24.3 × 18.4 × 5.6 cm.
No. So IV 383. FS. 6 IV 10.78/Cb 13.16, H. 15.34 m.

42. Fragment of a cross-bar.
Side A
Remains of a medallion showing eight pointed petals with incised middle rib. Groups of five sepals fill the space between the tips of the petals. Six anther lobes are turned towards the gynoecium with its stylized styles and stigmas. On the preserved side lotus buds are visible in the spandrels of the medallion.
Side B
Remains of a corolla of originally eight petals marked with three-rayed notches and incised borderlines. The central disc is not clearly recognizable. Traces of lotus buds in the spandrels.
Size: max. 17.0 × 14.2 × 5.4 cm.
No. So IV 248. FS. 6 IV 16.58/Cc 13.75, H. 15.25 m.

43. Fragment of a cross-bar.
Side A
Remains of a presumably twelve-petalled lotus with sepals between the tips. In the centre are traces of a ring of anther lobes. The spandrels of the medallion are filled with lotus buds.
Side B
Two petals of a lotus rosette with incised curved ribs and borderlines. The central disc is damaged. A lotus bud fills the preserved one spandrel.
Size: max.16.5 × 9.5 × 4.5 cm.
No. So IV 41. FS. 6 IV 12.3/Cc 7.05, H. 15.58 m.

44. Fragment of a cross-bar.
Side A
Part of a framed square with the remains of three pointed petals of a lotus rosette. The central disc is divided into quadrants by a beaded cross. Each quadrant contains two in-turned anther lobes.
Side B
Traces of pointed petals and a centre of concentric circles.
Size: max.19.0 × 13.0 × 2.5 cm.
No. So IV 104. FS. 6 IV 3.4/Cb 18.0, H. 15.55 m.

45. Fragment of a cross-bar.
Side A
Part of a corolla with remains of four petals showing a middle rib. Three sepals each fill the space between the petals. The gynoecium is edged. Lotus buds appear in the spandrels of the medallion.
Side B
Three petals with sepals and remains of a ring of anther lobes. The spandrels of the medallion are filled with lotus buds.
Size: max.17.0 × 16.0 × 6.0 cm.
No. So IV 96. FS. 6 III 8.00/Ca 3.80, H. 14.75 m

46. Cross-bar.
The oblique cut of the side indicates that this piece is part of a staircase railing.
Side A
Medallion with a corolla of eight petals of broad rounded shape and with incised middle rib and borderline. Between the petals appears one sepal each. Twenty anther lobes are arranged in a ring round the gynoecium.
Side B
Eight-petalled corolla with single sepals in between. The broad spatula-shaped petals are marked with a borderline and a middle rib diverging in its top. The large middle disc is divided into quadrants by a cross. Each quadrant contains two anther lobes and is edged with filaments.
Size: max. 26.3 × 17.0 × 7.0 cm.
No. So IV 1. FS. 6 III 12.3/Cb 6.2, H. 15.11 m.

47. Cross-bar.
From a staircase railing as no. 46.
Side A
Medallion with a lotus corolla of twelve petals alternating with groups of three sepals, one large, two small. The petals are pointed and marked with a three-rayed notch. The raised gynoecium is encircled by a ring of twenty-four anther lobes. Two of the spandrels of the medallion are filled with a lotus bud.
Side B
Twelve-petalled corollar of lotus petals alternating with sepals. The long round petals show a middle rib. The androecium consists of twenty-seven anther lobes arranged round the raised gynoecium.
Size: max.27.0 × 19.0 × 5.0 cm.
No. So IV 30. FS. 6 III 6.9/Cc 8.6, H. 15.40 m.

48. Cross-bar.
Completely plain cross-bar from a spot north-east of the apsidal temple.
Size: max. 30.3 × 18.0 × 4.8 cm.
No. So IV 285. FS. 6 IV 12.94/Cc 19.70, H. 15.15 m.

49. Cross-bar.
Another completely plain cross-bar from the same spot as no. 48.
Size: max. 30.5 × 18.5 × 4.8 cm.
No. So IV 308. FS. 6 IV 12.45/Cc 20.00, H. 15.05 m.
Note: Three more fragmentary plain cross-bars from the same special find spot in 6 IV/Cc, registered under So IV 286–288.

3) Coping-stones

The altogether eight fragments of coping-stones recovered at Sonkh are of two different shapes and patterns. With the exception of no. 51, which is a surface find, the pieces have been found to the north and east of the excavated area. The find-spots do not help to determine the course of the railing in this region, but there is ample reason to believe that nos. 52 and 53 were lying nearly in situ as part of the northernmost line of the enclosure.

50. Coping-stone showing a slightly rounded broad top projecting over the narrower lower tier. Both sides are carved with the same design. Above stretches a long sectioned pole from which six bells alternating with *śaṅkhas* are hanging down. The lower edge of this tier is marked with two incised horizontal lines.
Below, a lotus creeper is twining along floral and symbolic patterns.
In the bottom of the stone are three mortise holes, each measuring ca 9.5 × 7.0 × 4.3 cm, placed between ca 24.5 and 29.0 cm apart.
Size: max. L.116.5 cm. H. 23.0 cm. Depth of upper tier 23.0 cm, lower tier 17.0 cm.
No. So IV 191. FS. 6 IV 2.68/Cd 4.30, H. 14.86 m.

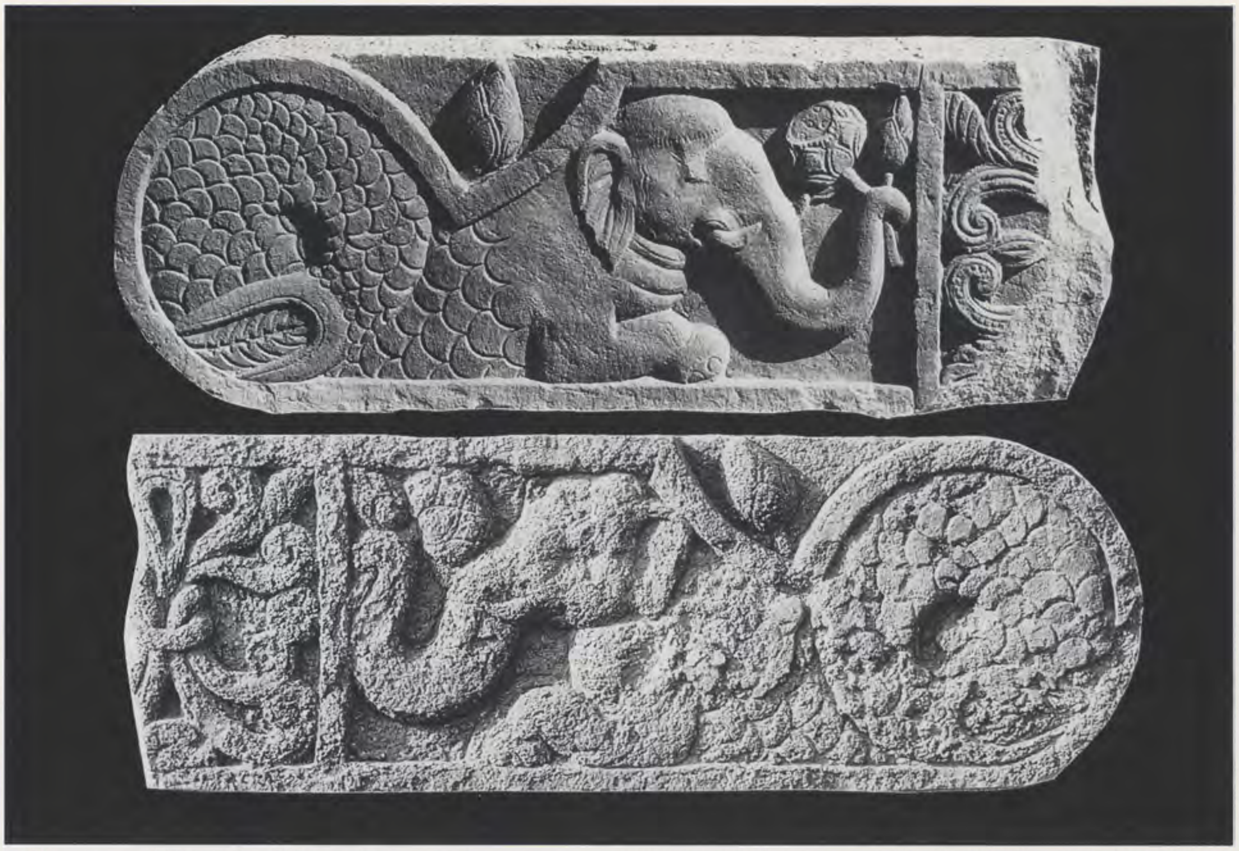
51. Fragment of a coping-stone of exactly the same type and pattern but split off lengthwise. Remains of four mortise holes at the bottom.
Size: max. L.84.0 cm. H. 23.0 cm. D. 11.0 cm.
No. So IV 65. Surface find.

52. Fragment of a coping-stone of the same type and pattern as nos. 50 and 51. On one end a 6.5 cm long tenon is sticking out.
Size: max. L.63.0 cm. H. 22.5 cm. D. 18.0 cm.
No. So IV 66. FS. 6 IV 15.3/Cc 6.2, H. 15.65 m.
Note: One more small fragment of same type of coping-stone, found at 6 IV 3.98/Cc 17.32, H. 14.86 m, registered as So IV 226.

53. Long coping-stone in the shape of an upside down U in section. Plain rounded top over a flatly carved three-stepped decoration consisting of 1) a sectioned string, 2) a long row of vertically arranged thin anther lobes and, 3) a band of lotus petals, again vertical, alternating with three sepals, one long, two small. The petals are marked with an incised middle rib and a borderline.
The bottom of the stone shows four mortise holes measuring between 6 × 6 and 14 × 6 cm, having a depth of 3.0 to 4.0 cm.
Size: max. L.153.0 cm. H. 22.0 cm. D. 15.5 cm.
No. So IV 67. FS. 6 IV 15.7/Cc 6.9, H. 15.53 m.

54. Fragment of a coping-stone of the same type and decorative pattern as no. 53. On one side, most of this decoration is broken off.
At the bottom, one mortise hole of 9.0 × 6.5 × 3.5 cm is indented.
Size: max. L. 56.0 cm. H. 22.0 cm. D. 16.0 cm.
No. So IV 190. FS. 6 IV 3.60/Cc 6.57, H. 15.26 m.

55. Small fragment of a coping-stone showing the decorative pattern as nos. 53 and 54.
Size: 14.5 × 12.0 × 3.5 cm.
No. So IV 46. FS. 6 IV 16.8/Cc 9.4, H. 15.45 m.
Note: One more small fragment of same type of coping-stone, found at 6 IV 17.3/Cc 8.4, H. 15.35 m, registered as So III 47.



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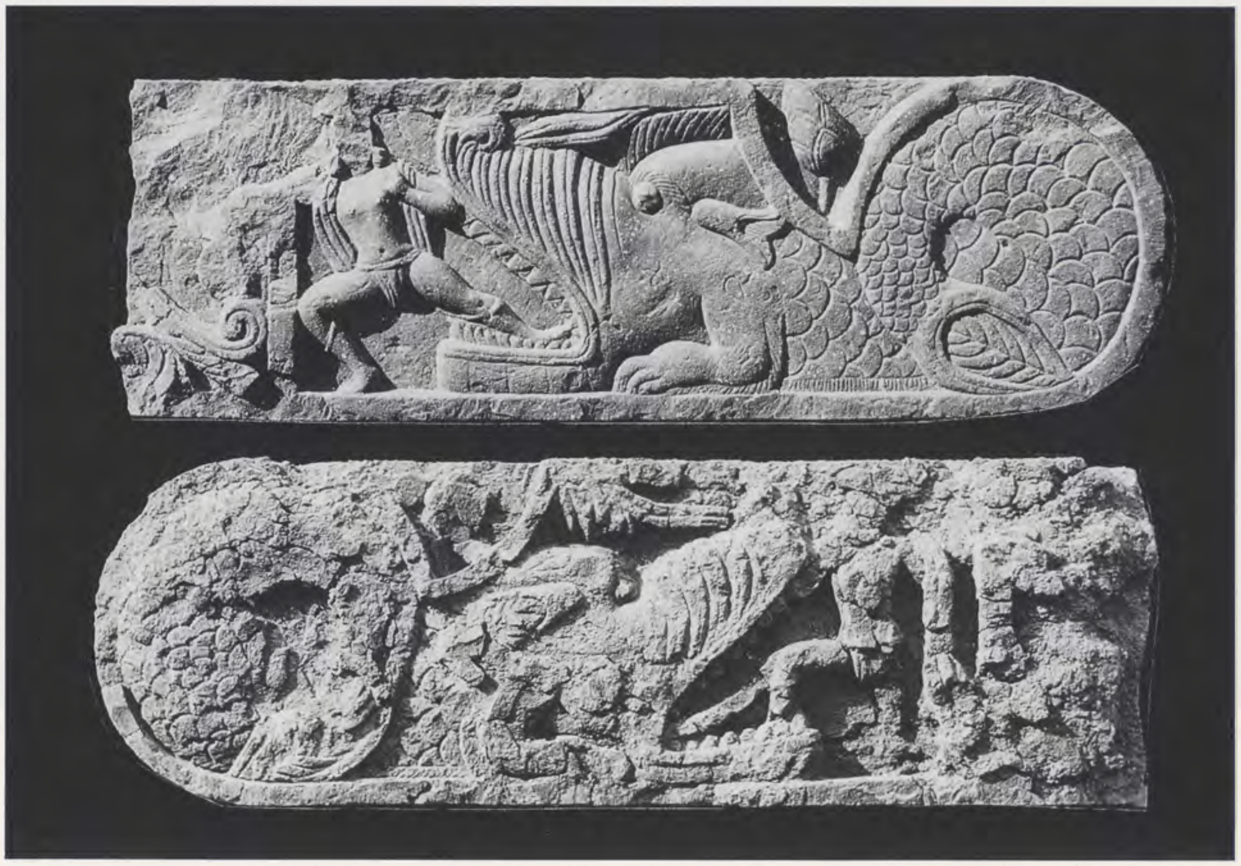

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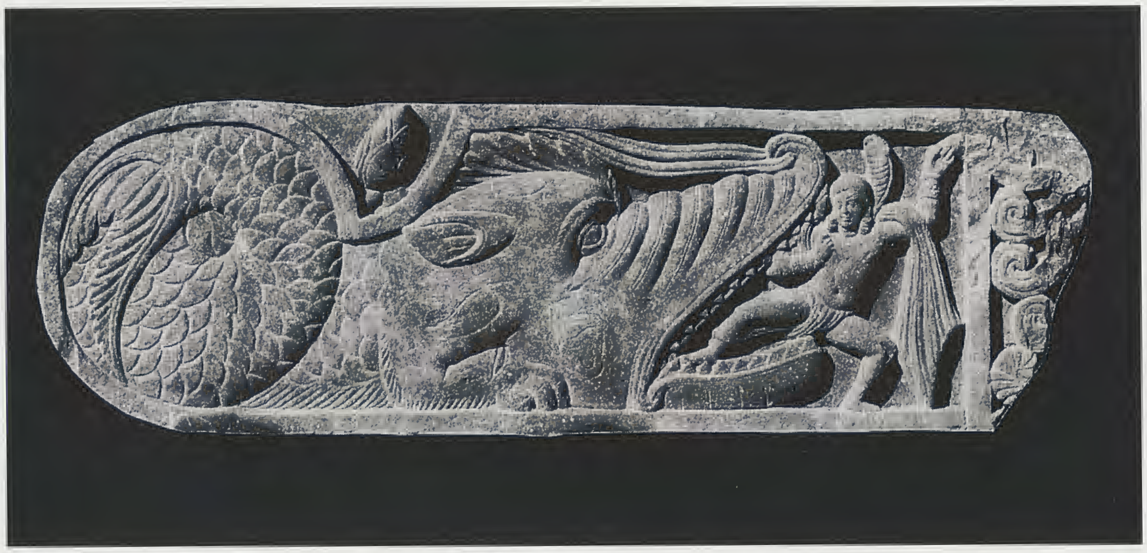

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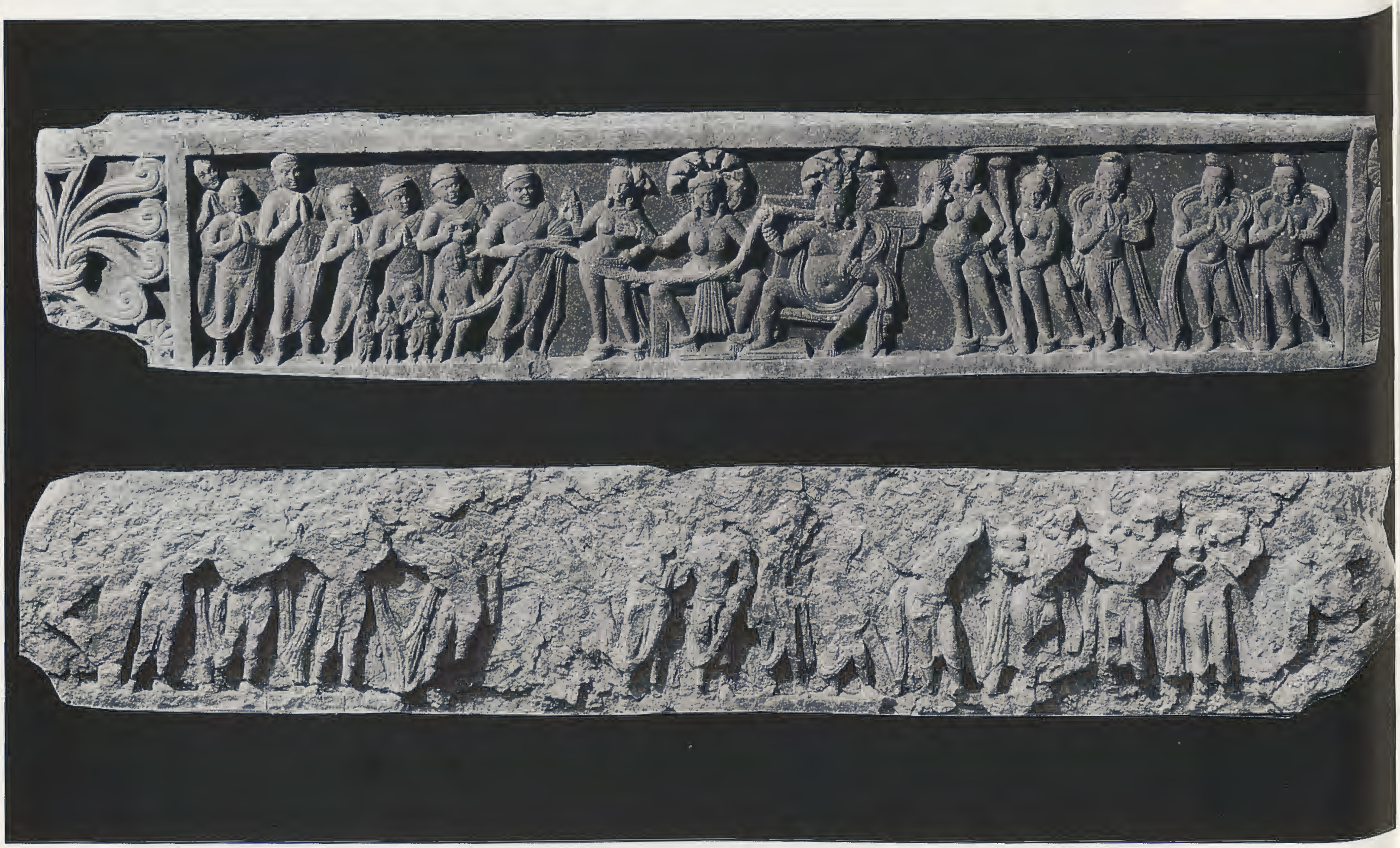

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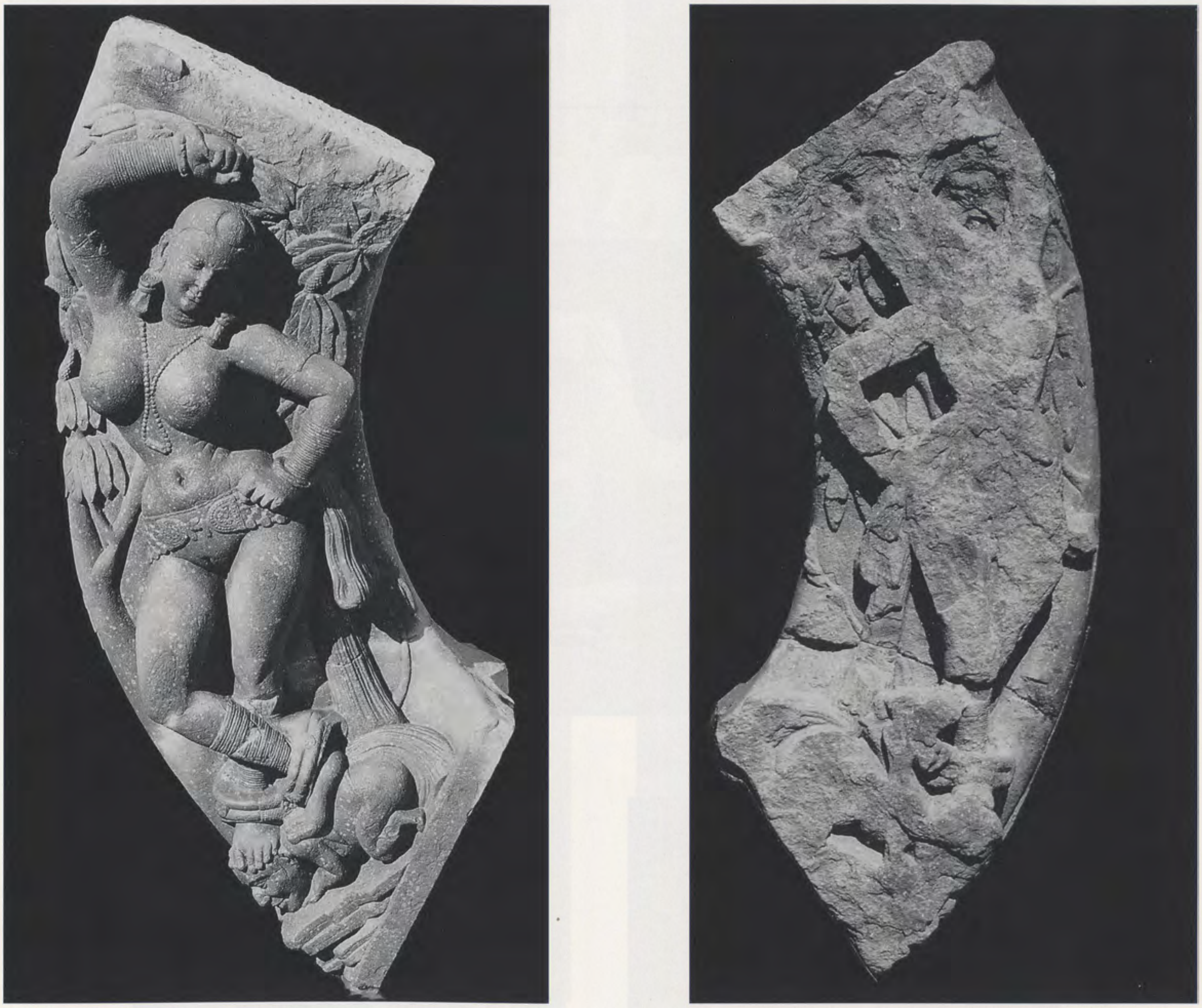

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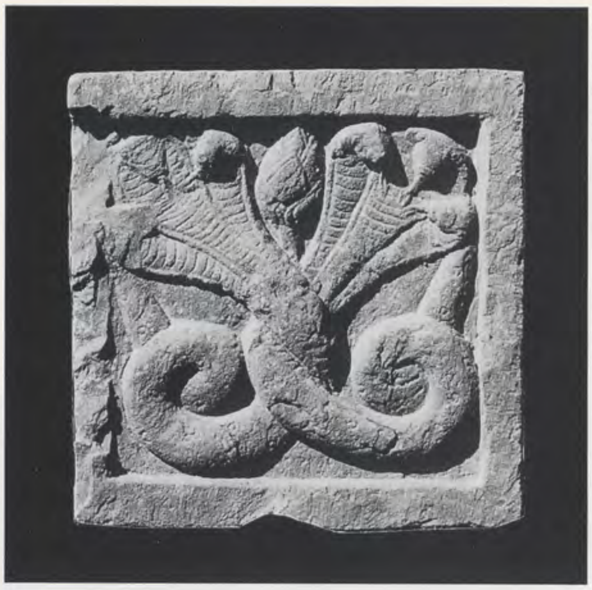

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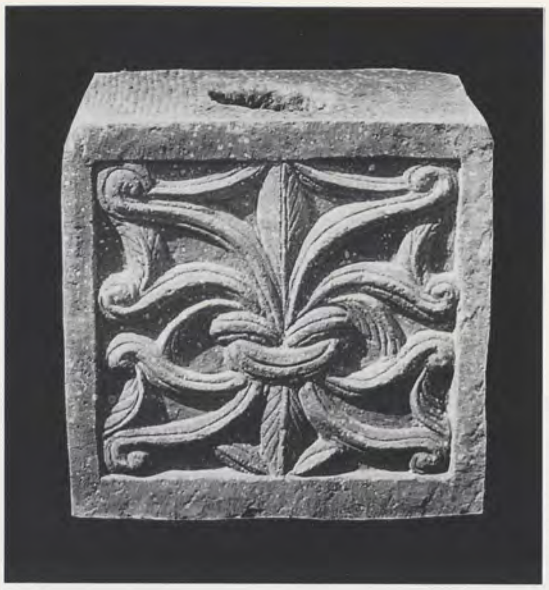

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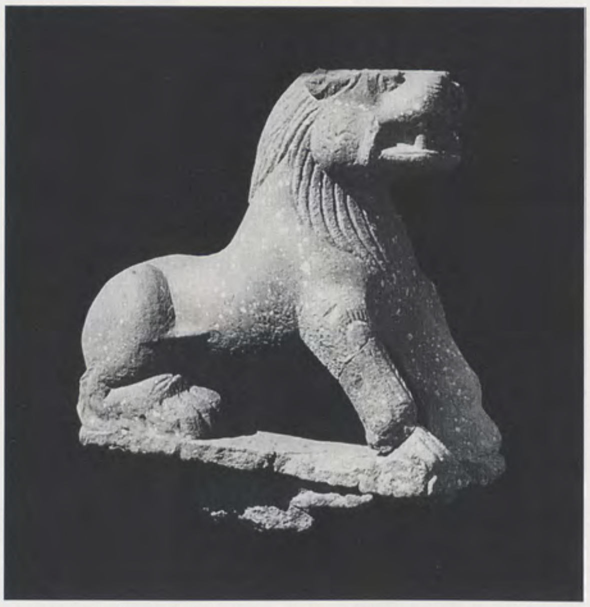

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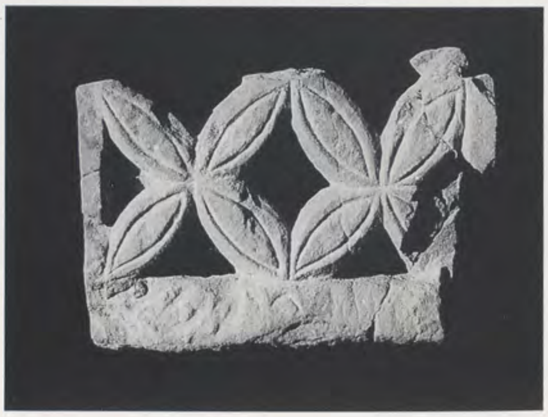

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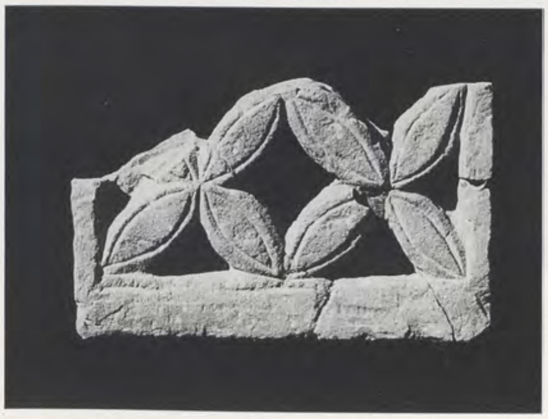

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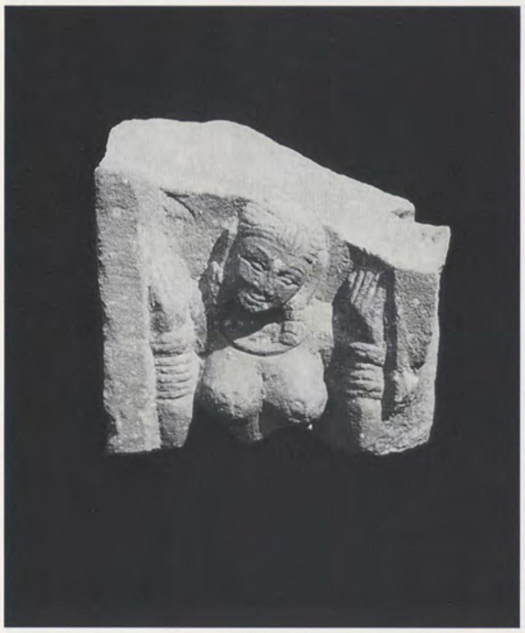
Sculptures of the Gate



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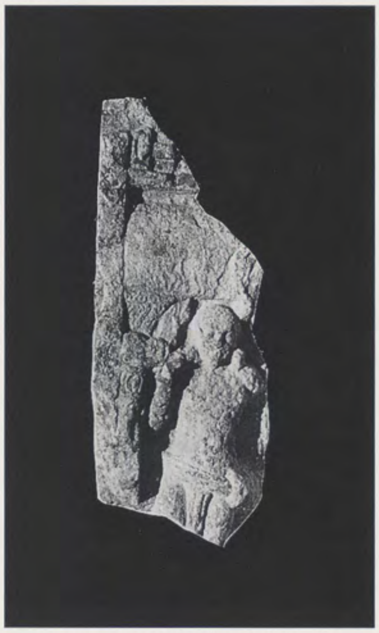

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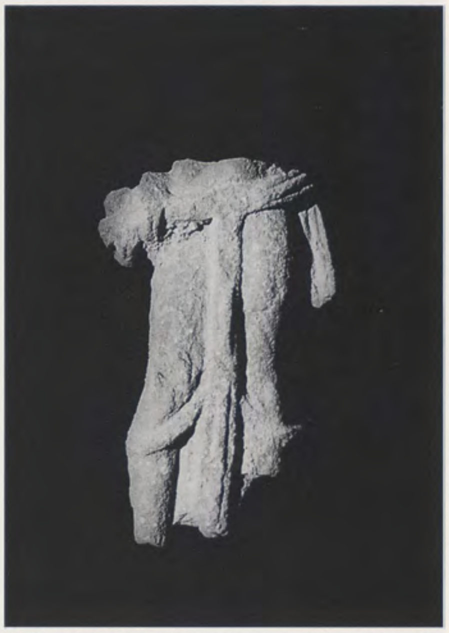

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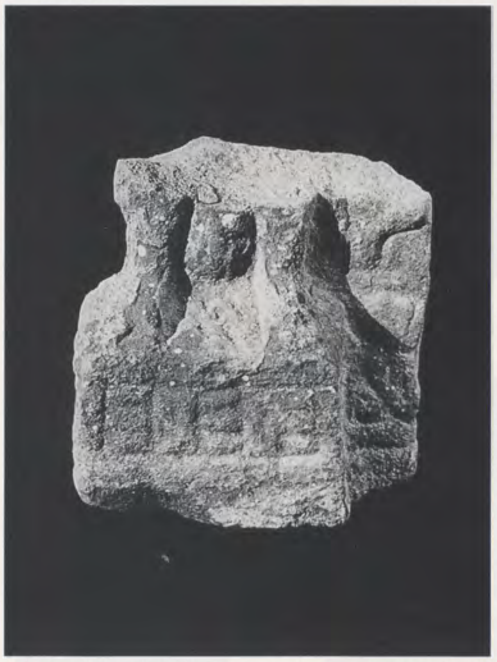

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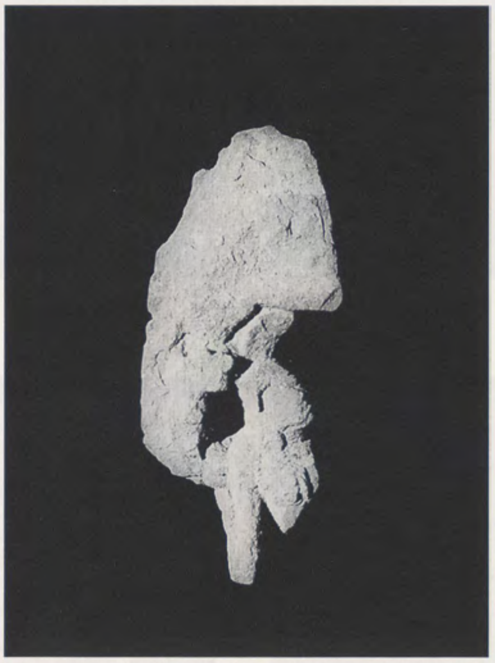

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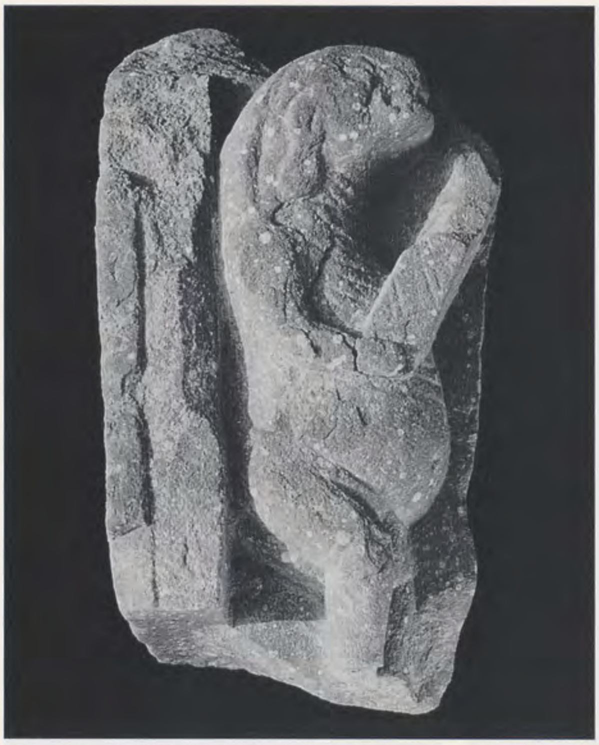

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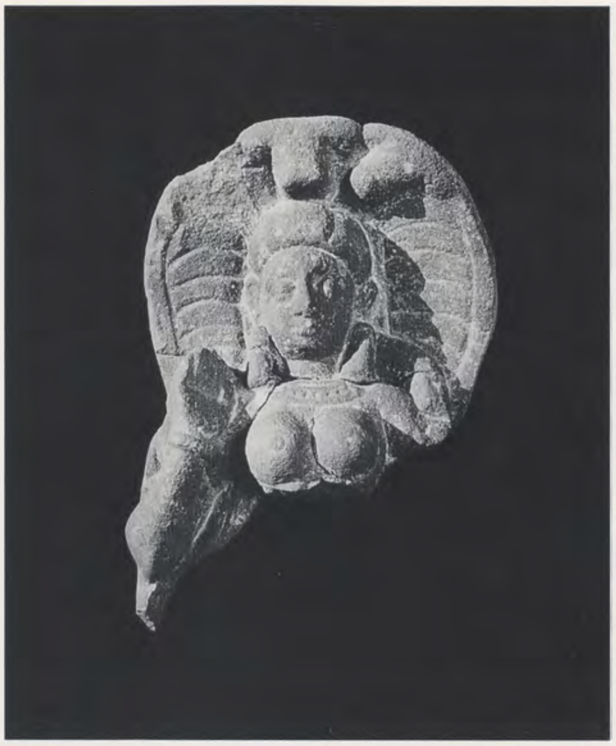

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20a

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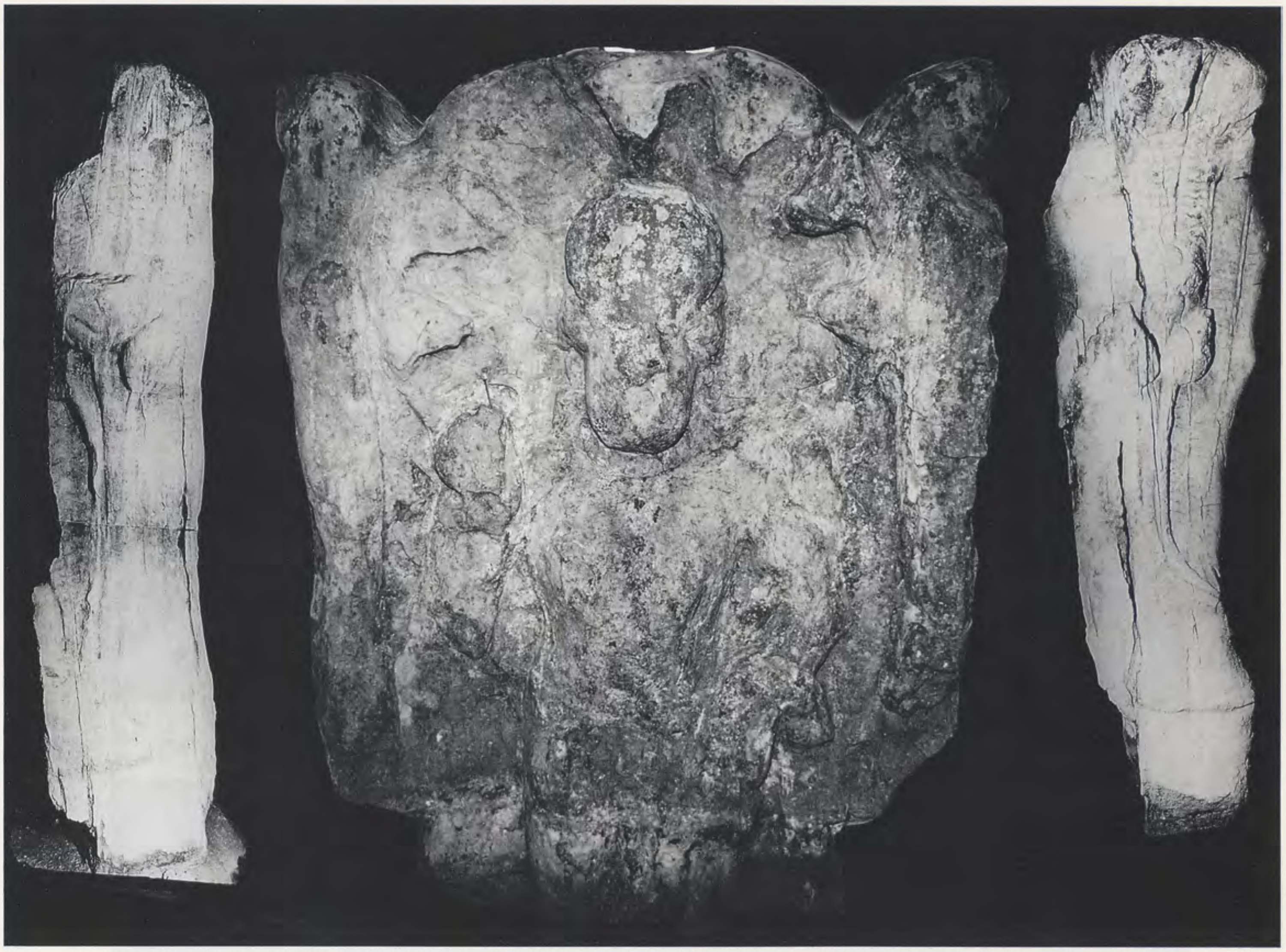

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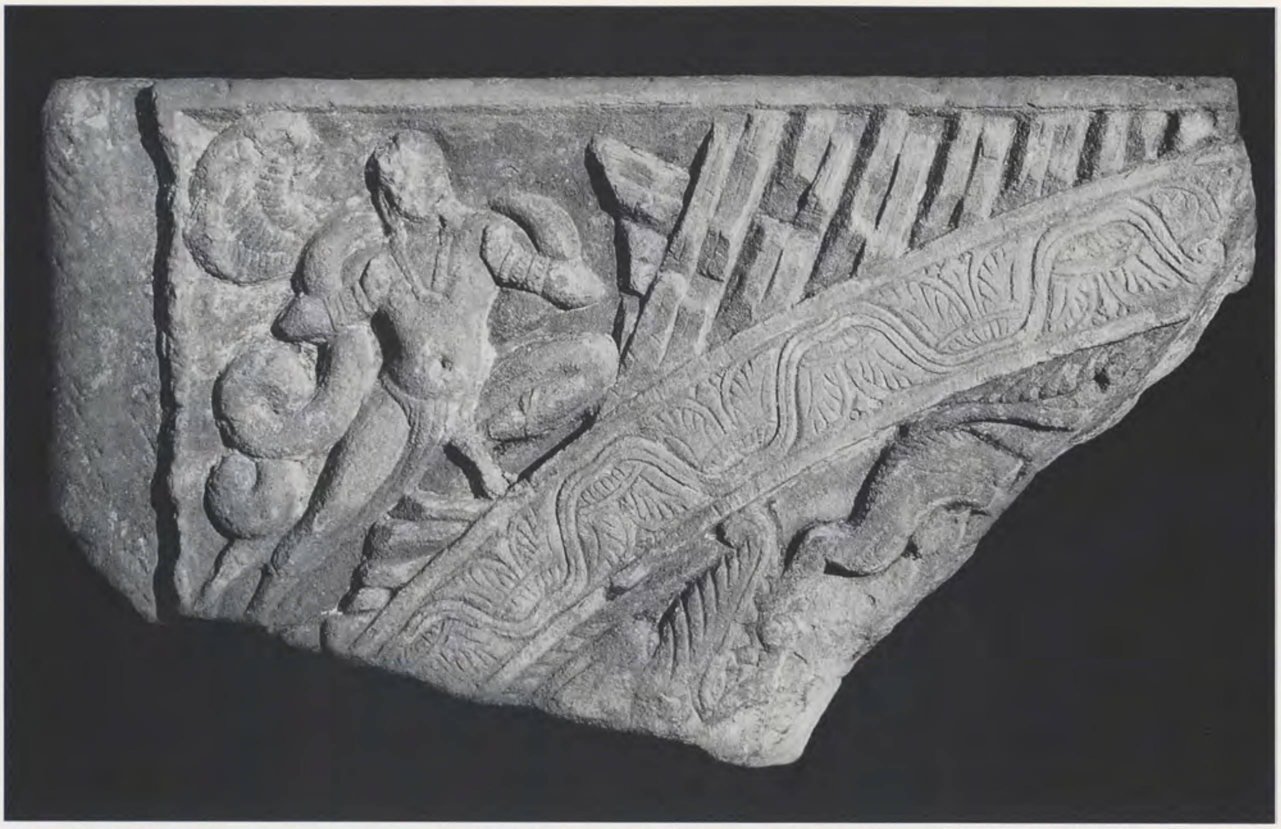

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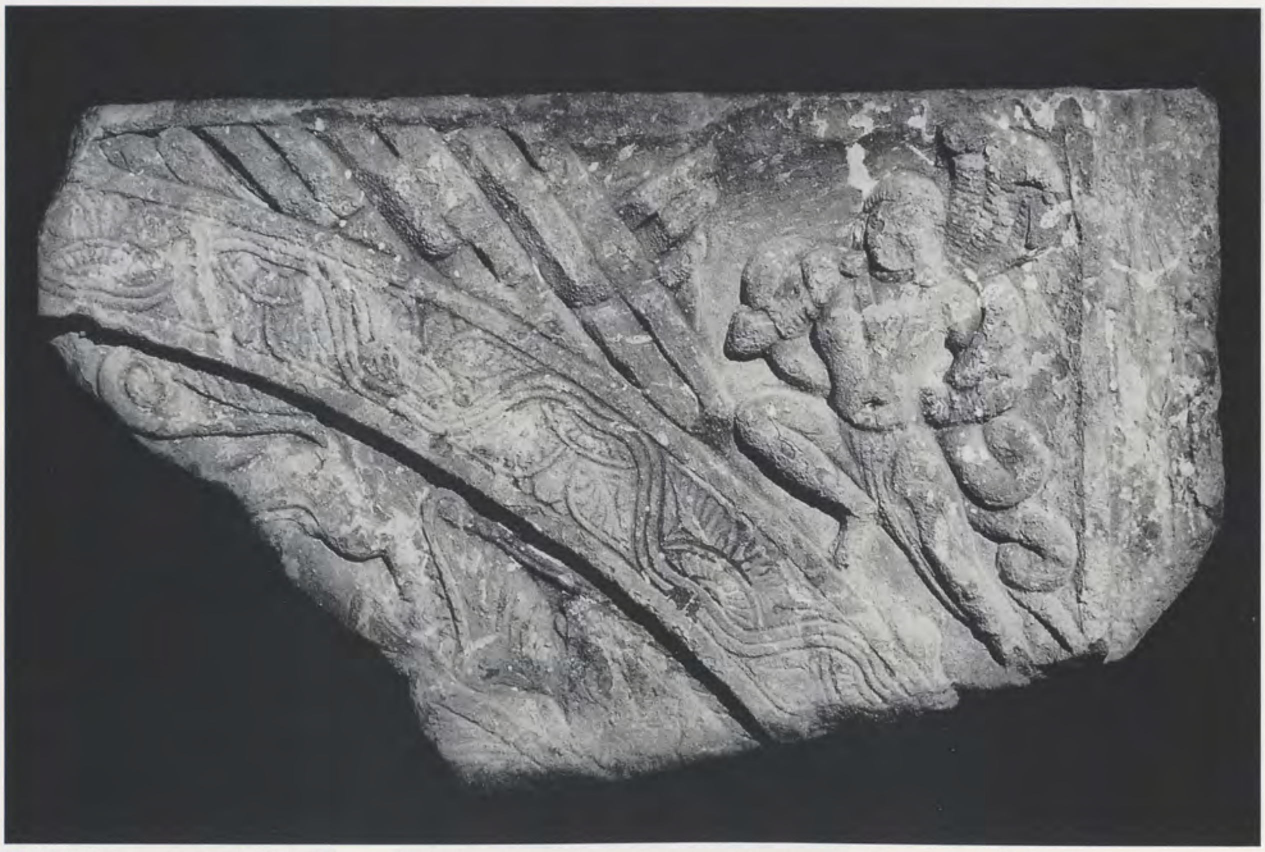

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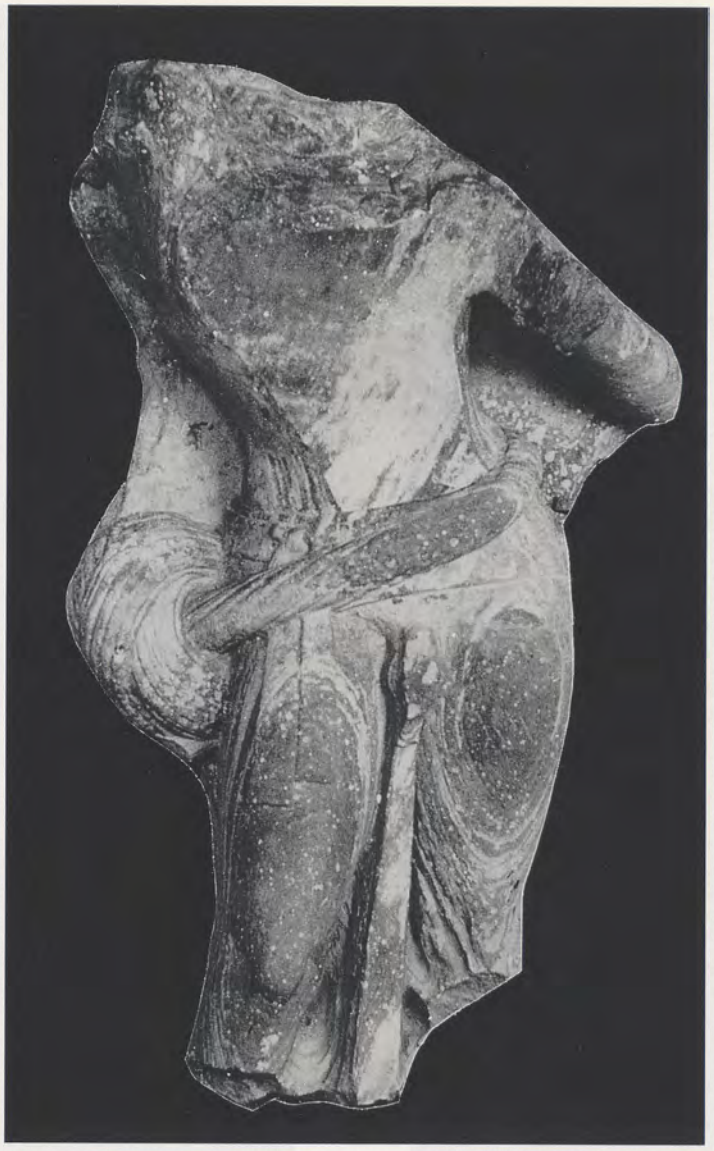

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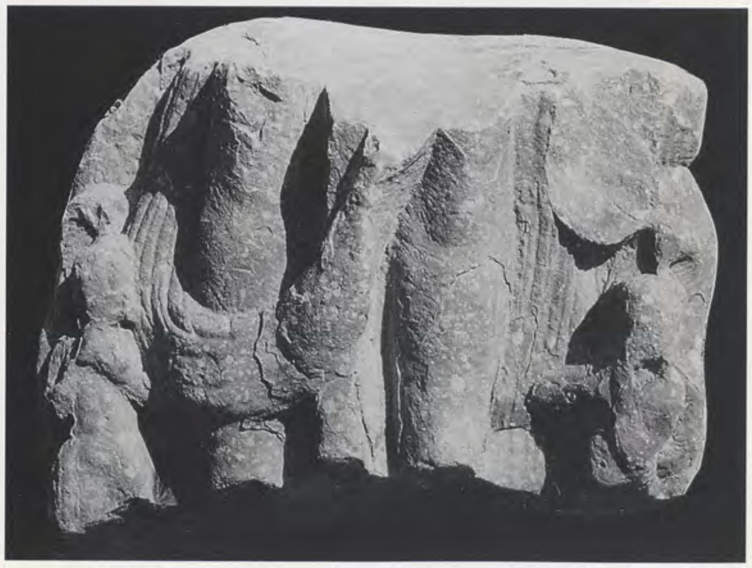

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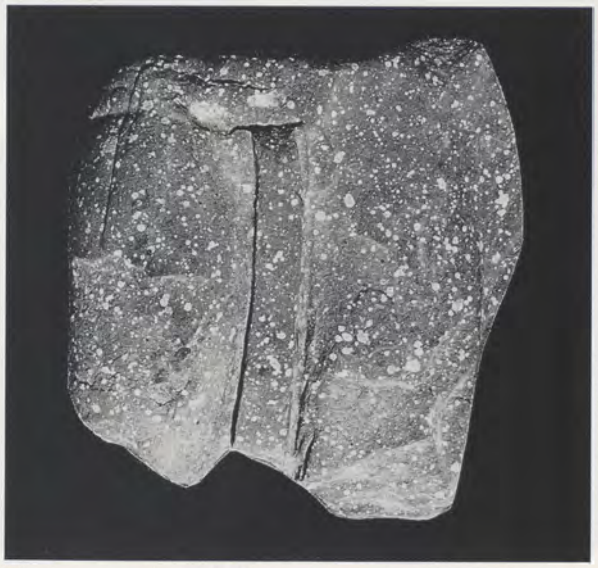
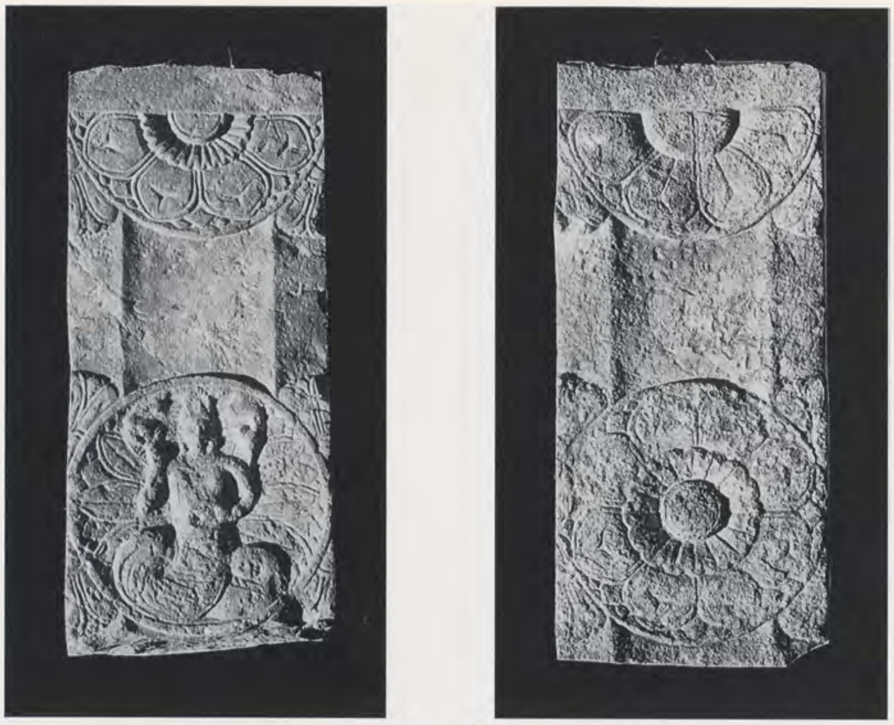
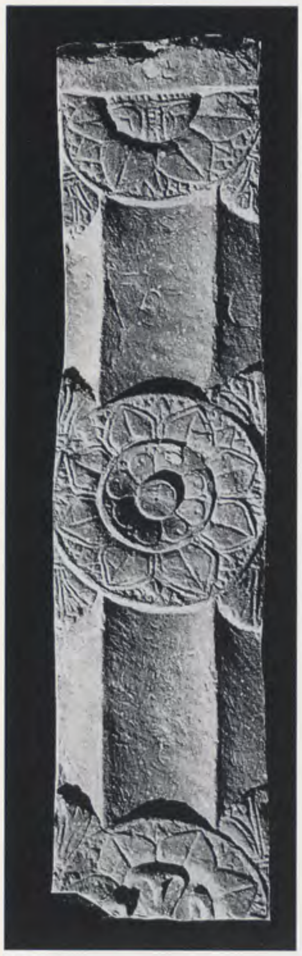


26

Miscellaneous Stone Sculptures



27 Obverse and Reverse



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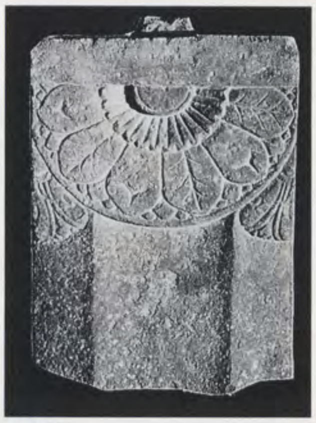

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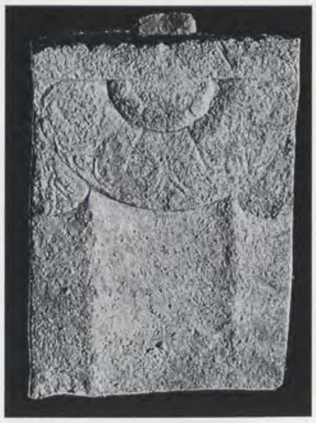

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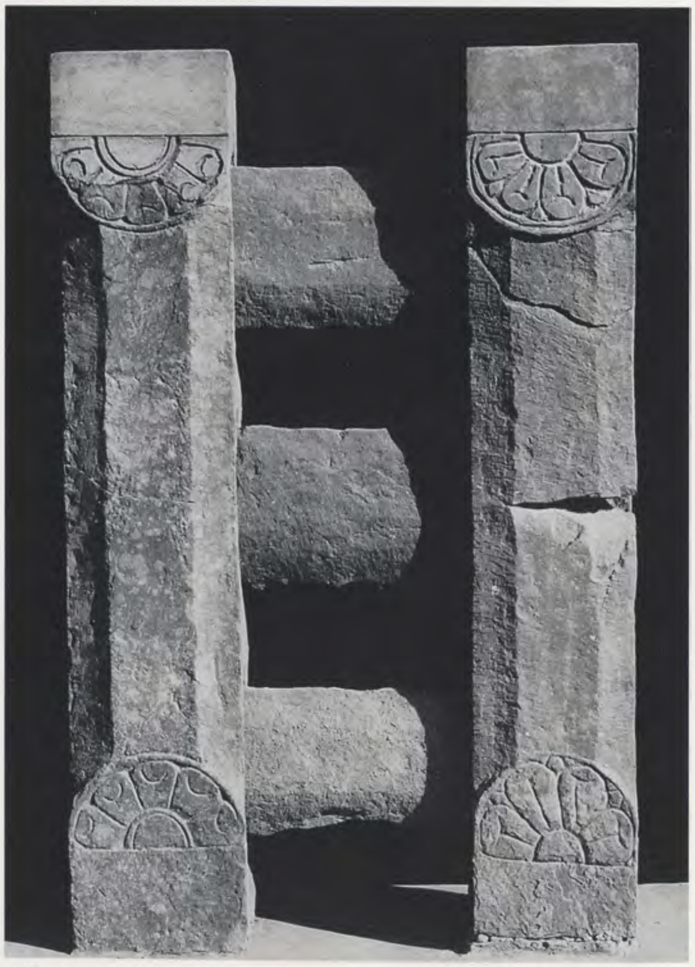

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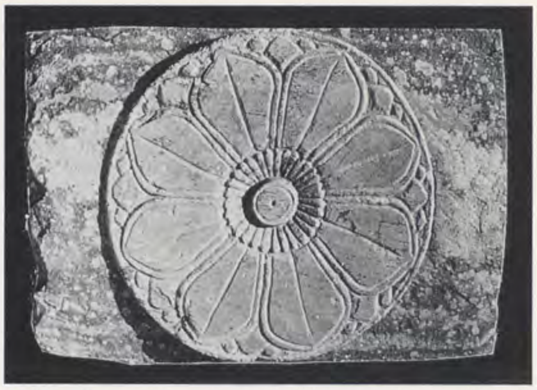
Sculptures of the Railing: Pillars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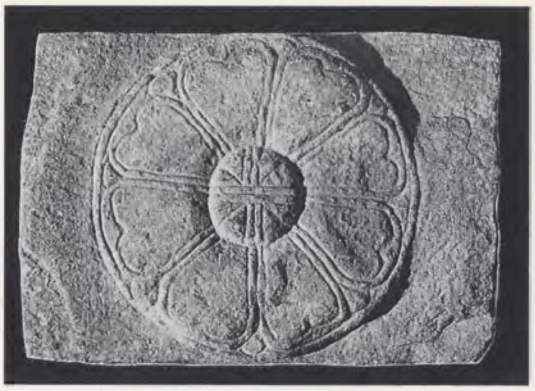
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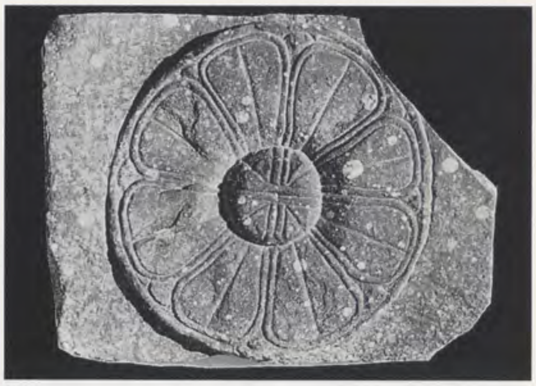
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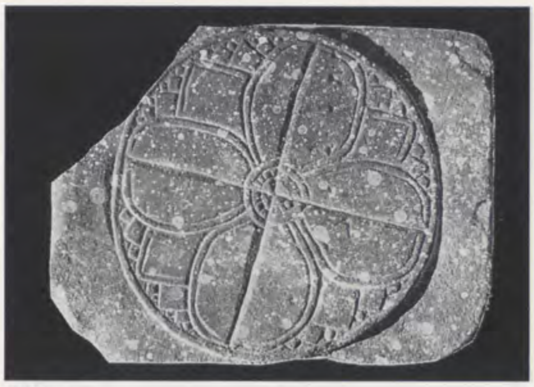
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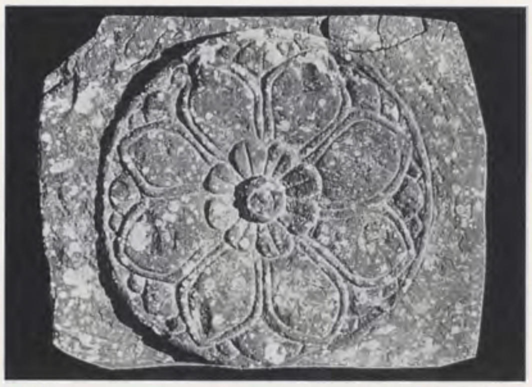
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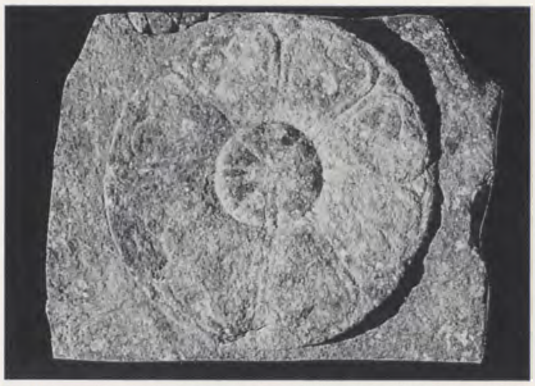
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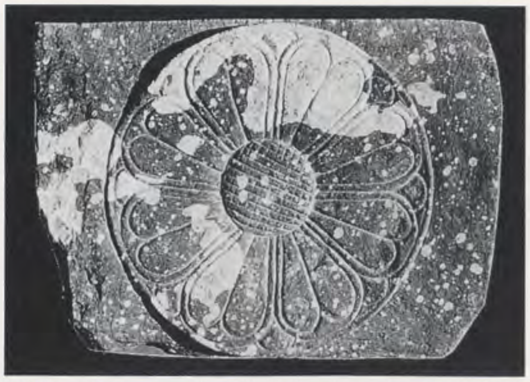
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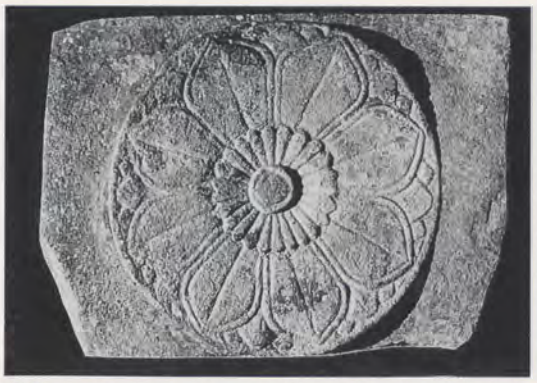
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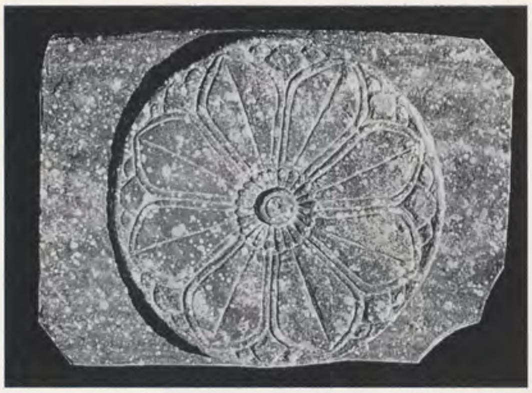
Sculptures of the Railing: Cross-bars



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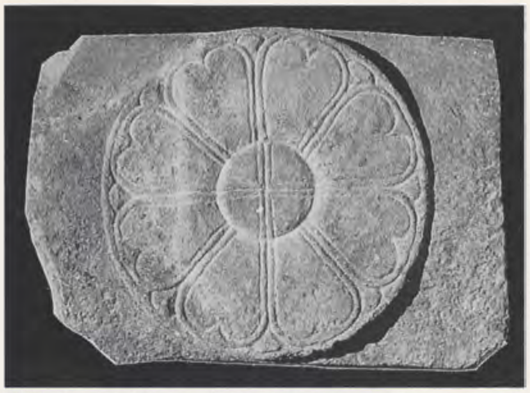

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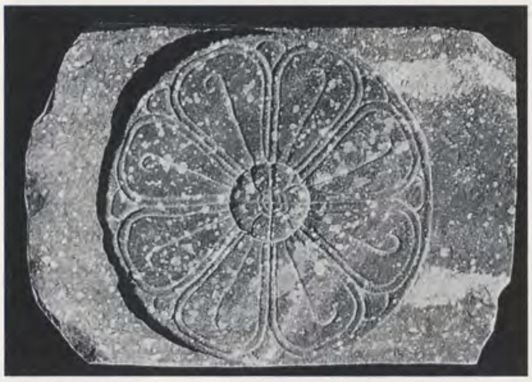

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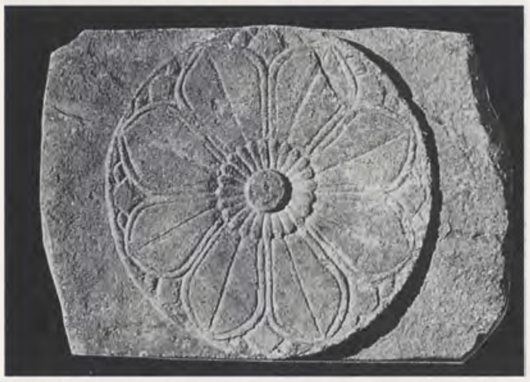

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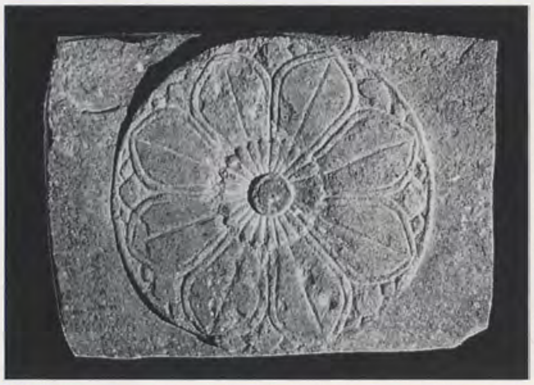

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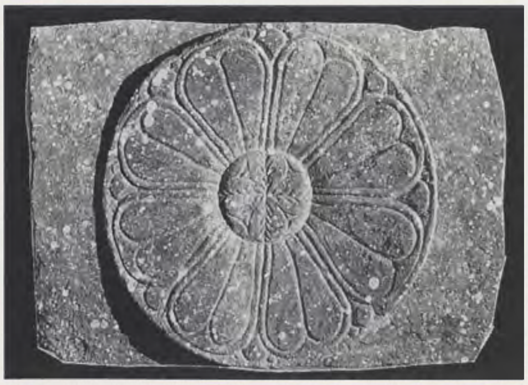

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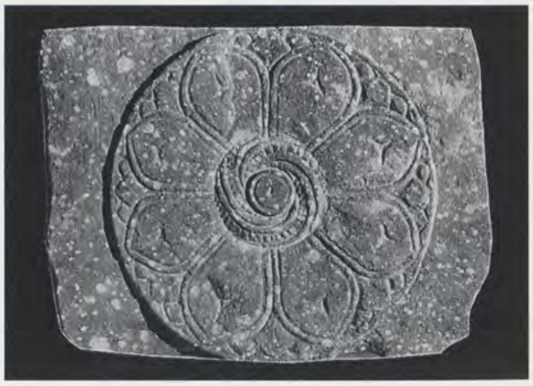

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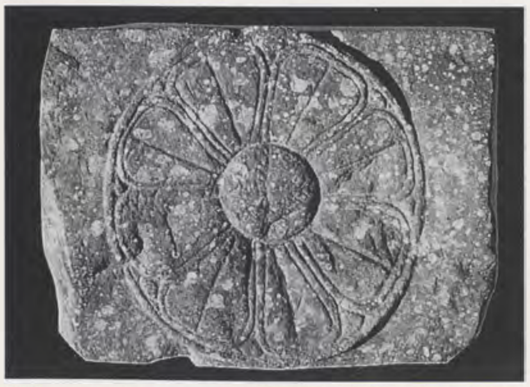

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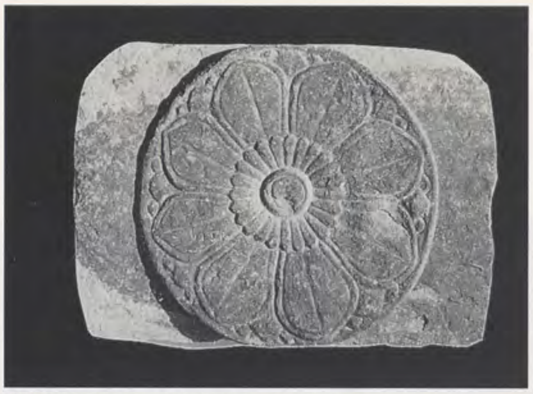
Sculptures of the Railing: Cross-bars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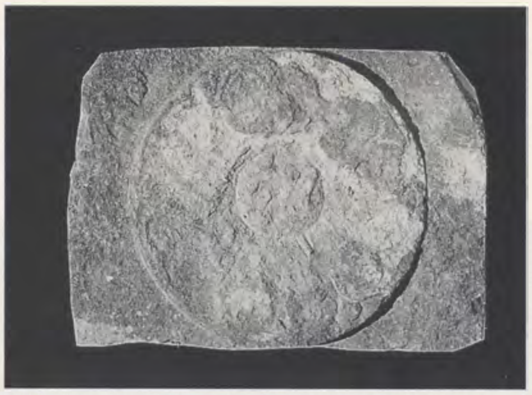
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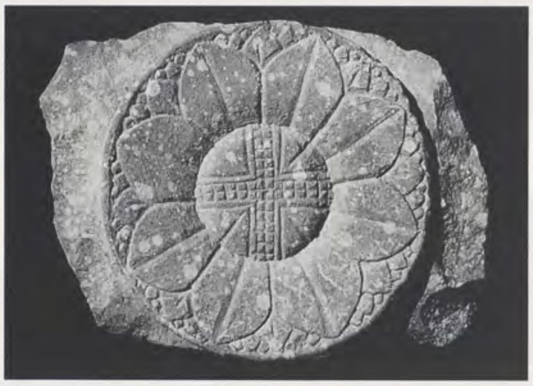
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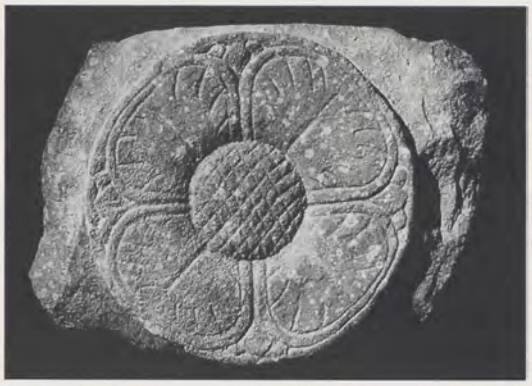
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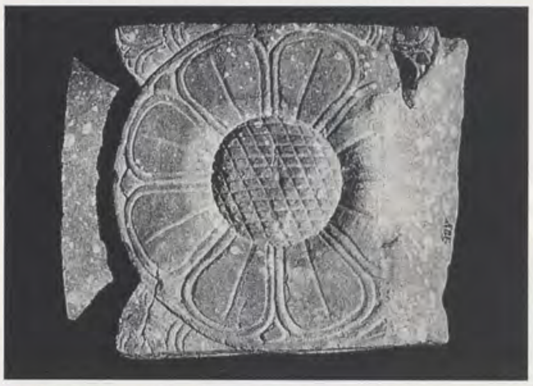
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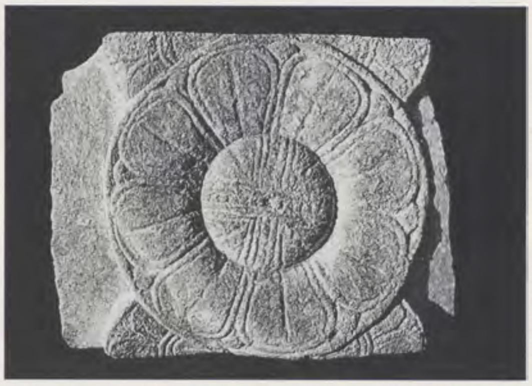
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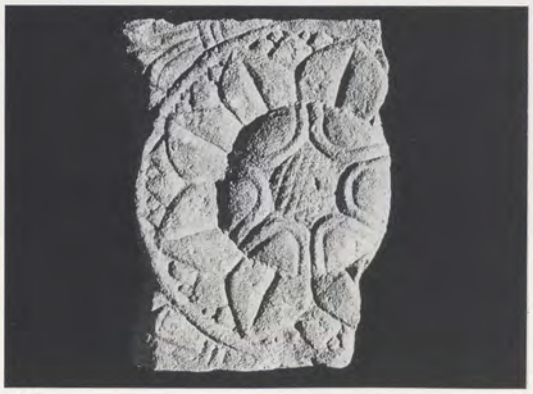
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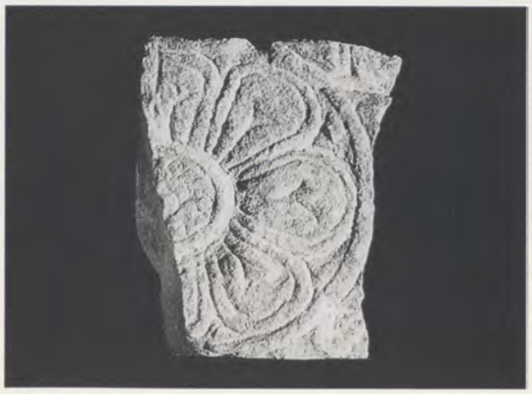
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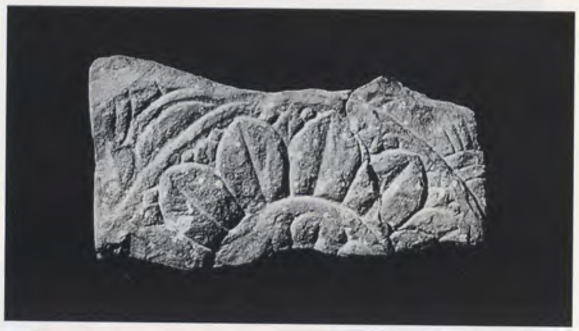
Sculptures of the Railing: Cross-bars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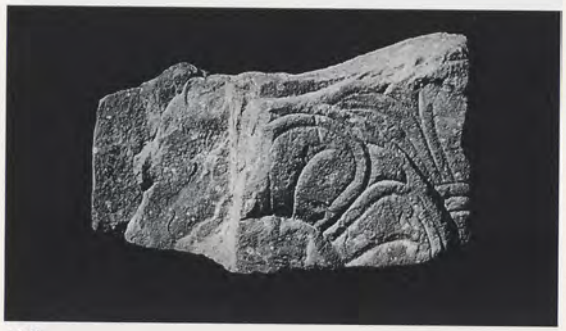
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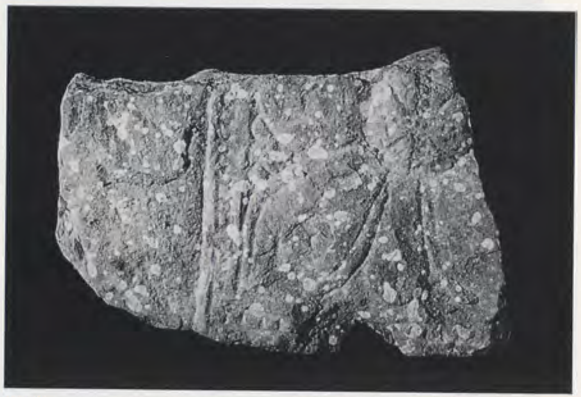
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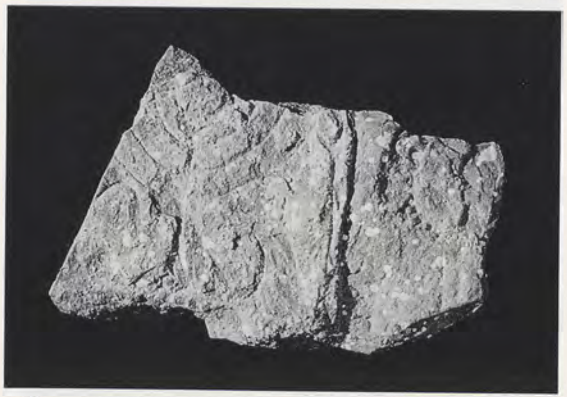
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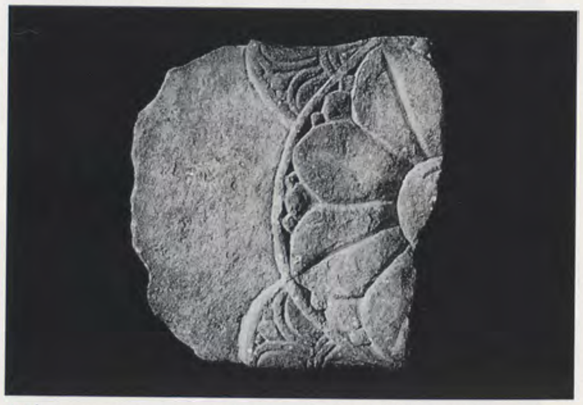
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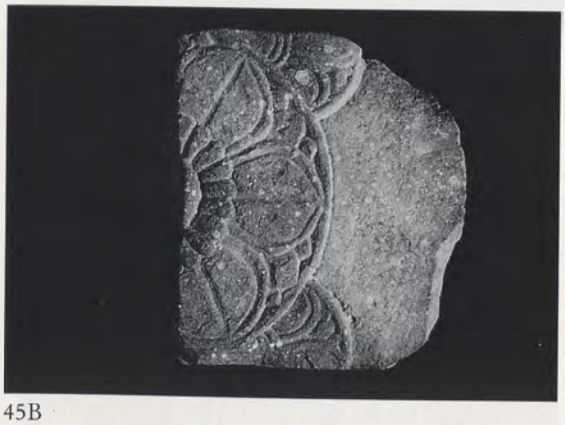
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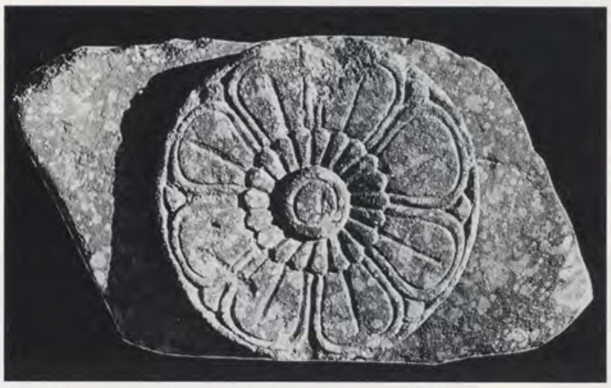
Sculptures of the Railing: Cross-bars



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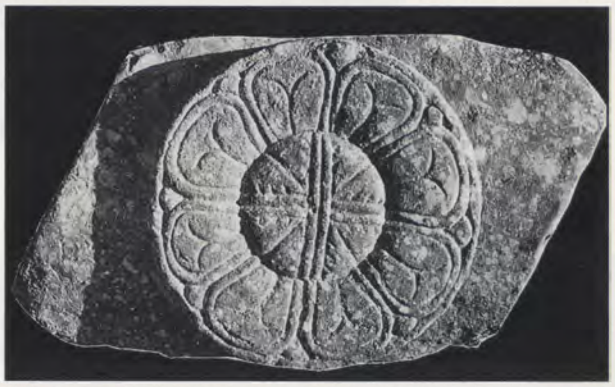

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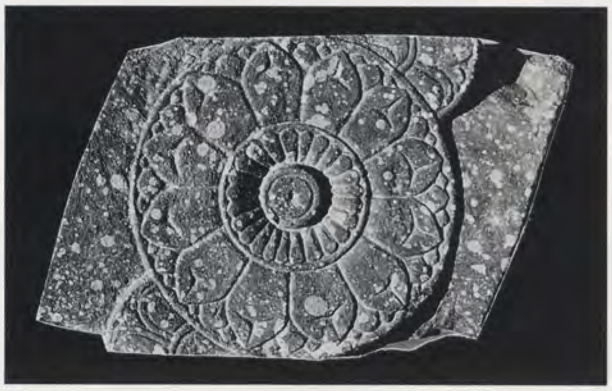

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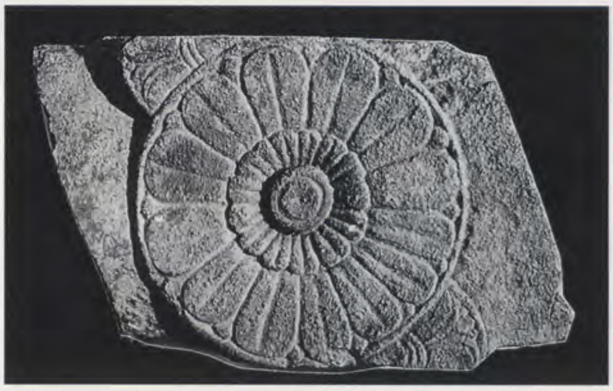

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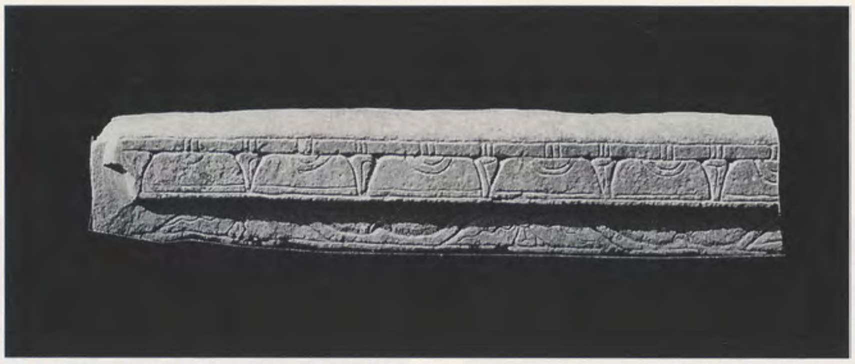
49

Sculptures of the Railing: Cross-bars



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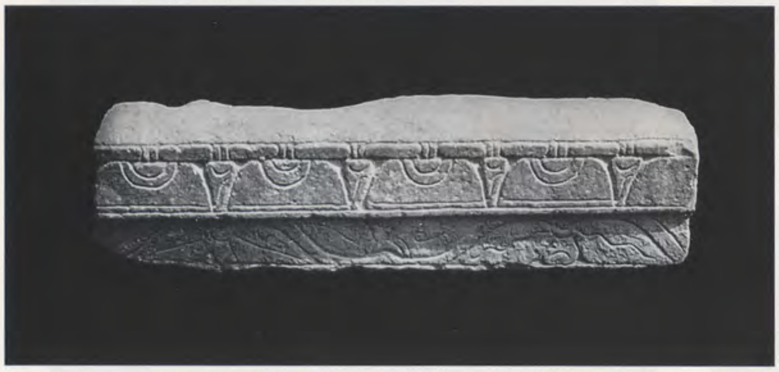

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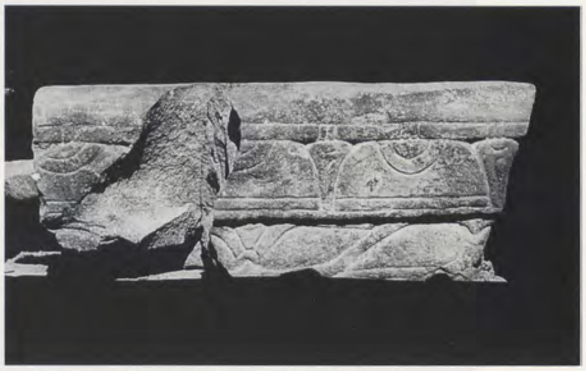

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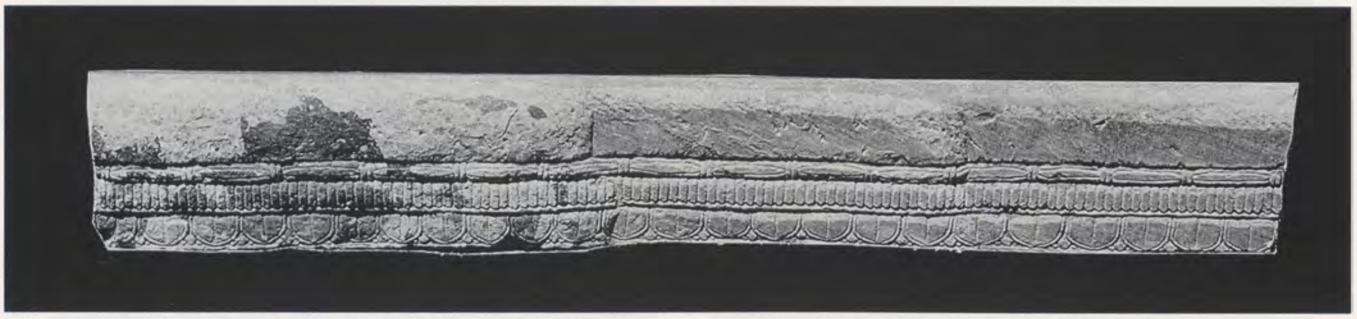

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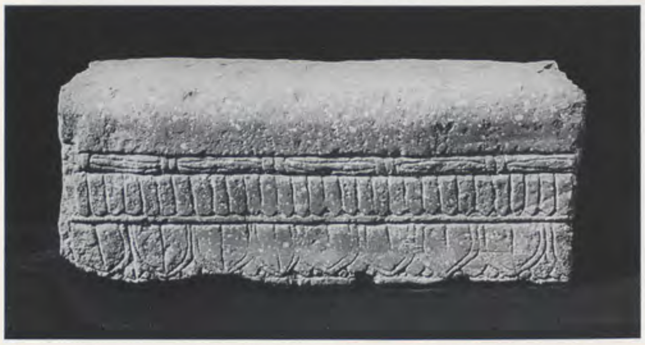

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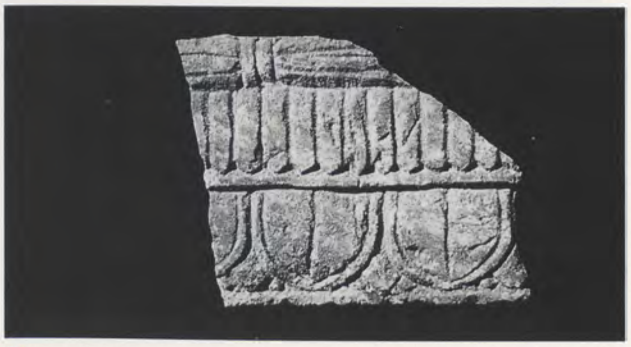


55

Sculptures of the Railing: Coping stones

D. TERRACOTTA MOULDS AND FIGURINES

1) Human figures

1. Clay mould, taken from the group of children in the relief of the middle lintel of the bottom architrave (Sculptures, no. 4). The mould is made of clay, probably sun-dried but rather hard. It shows one male figure with the hands in añjali in the centre and parts of the bodies of two other figures, one on each side. Although the scene is incomplete, the mould is not a fragment. Quite intentionally it contains a detail only of a larger composition. The clay impression, newly made from the mould, shows that the three figures are of different height, increasing from the left to the right. In fact, the mould reflects a part of the group of children in the stone relief mentioned above, from which it has been directly taken in the Kuṣāṇa period, when the gate was still in use. The central figure of the mould is the second child from the right in the group, the arm and leg of the right figure is of the tallest boy, the left figure is identical with the second boy from the left.
The size of the figures in it is exactly the same as that of the figures in the stone relief. In the background, the dhotī of the third man of the delegation is visible.
Size: H. 9.4 cm. B. 5.6 cm. D. 2.0 cm. Colour: grey.
No. So IV 206. FS. 6 IV 4.78/Cc 11.65, H. 14.95 m.

2. Clay mould, taken from the group of children in the relief of the middle bottom architrave of the gate. The mould is made in the same way as no. 1. It contains the figures of the three smaller children of the group of four in the stone relief, leaving out the tallest boy. At the bottom, the plain frame of the relief serves as the footing for the figures in the terracotta reproduction. The size of the children is again the same as in the stone, and the "footing"-part is of the height of the original frame.
Size: H. 9.5 cm. B. 7.2 cm. D. 1.6 cm.
No. So IV 423. FS. 6 IV 4.10/Cc 10.16, H. 15.35 m.

3. Original terracotta plaque from a mould similar to nos. 1 and 2. Fragmentary brownish plaque, found in the pottery deposit in 6 IV/Cc, i.e. the find-place of the two moulds described above. The plaque is of a rough texture and in a bad state of preservation. Even so, the three figures of the group of four children can be easily identified with those in the mould no. 2, although the plaque may not necessarily be produced from it. Since two moulds of the children-group have been found, there might have existed several more. Again, the figures in the terracotta plaque are of the same size as those in the stone relief.
Size: H. 6.3 cm. B. 6.4 cm. D. 1.9 cm .
No. So IV 330. FS. 6 IV 3.6/Cc 11.6, H. 14.74 m.

4. Clay mould, presumably taken from the reverse relief of the middle lintel of the bottom architrave (Sculptures, no. 4) The mould is made of greyish clay, sun-dried but rather hard. The newly made cast shows the head and breast of a male figure. The beautifully modelled face livens up through the vivid expression of the wide eyes and parted lips. The slightly left turned head is covered by spiral hair, the ear-lobes are carrying heavy pendants. A single pearl necklace (*ekāvalī*) is placed around the neck. To the left, two or rather three cobra heads are visible. Although the upper part of the hood is not included in the mould, the final number of snakes was in all probability seven. Apparently, this figure represents a Nāgarāja. Since the mould has been found in the same place with the others (nos. 1–2), it might not be impossible that this head had also been taken from the bottom lintel of the gate, i.e. from the badly preserved *reverse* (no. 4). If so, it could have belonged only to the central Nāga figure. The head is 3.4 cm high, and that is exactly the size of that of the Nāgarāja (without diadem) and his female companion in the *obverse* relief.
Size: H. 6.3 cm. B. 6.1 c m. D. 2.6 cm.
No. So IV 422. FS. 6 IV 8.93/Cc 10.17, H. 14.69 m.

5. Small fragment of a mould made of greyish clay. Preserved is the left side of a sitting human body. The left arm is bent, its hand is turned into a fist and lying in height of the seat. In the background appear parts of the back of a throne-chair.
Size: H. 6.2 cm. B. 4.45 cm. D. 2.0 cm.
No. So IV 420. FS. 6 IV 5.22/Cc 10.14, H. 15.05 m.

6. Fragment of a hollow male head in typical Kuṣāṇa style. Nose and eyebrow are sharply impressed, the mouth stands slightly open. Pupil and iris are applied in shape of a small disc on the eyeball. In the long-drawn ear lobe hangs a tripartite ear-ring. Of the hair, only a few obliquely incised lines are preserved. From there, a sort of chin strap decorated with a rhomboid pattern is running around the face and chin.
This face most probably represents a Nāgarāja and was placed under a nāgahood like the one under no. 7. From the size of the face, it might even be part of exactly this hood. In any case, the complete figure, either standing or seated, must have been unusually tall for a terracotta image.
Size: H. 12.0 cm. B. 10.0 cm.
No. So IV 138. FS. 6 IV 0.7/Cc 15.0, H. 15.53 m.

7. Mutilated nāga-hood with the remains of seven cobra heads. The fairly preserved three heads show the mouths shooting forward and the eyes incised as rectangles with a disc. The skinfolds are given as horizontal strokes in the front of the hood, leaving the centre blank where, most probably, the face of a Nāgarāja was attached (see no. 6). On top of each cobra head *maṅgalas* like *nandyāvarta* and *svastika* are roughly incised.
At the lower end a tenon protrudes for the insertion into the body of the figure.
Size: Diameter 23.0 cm. D. max. 7.0 cm. Colour: brickred.
No. So IV 95. FS. 6 III 16.23/Cc 10.70, H. 14.88 m.
Note: One more small fragment of a similar hood with vestiges of black slip has been found at 6 V 5.25/Cc 11.87, H. 14.92 m, and is registered under So IV 325.

8. Hand holding a water vessel. The thumb, marked with its nail, presses against something that should be the opening of the vessel what obviously did not come off.
Judging from the other finds made at this very spot a hand with a vessel is most probably to identify as that of a standing Nāga.
Size: max. 8.7 × 3.2 × 4.0 cm. Colour: brick-red.
No. So IV 382. FS. 6 IV 12.16/Cb 19.95, H. 15.22 m.

9. Female head. The face has receding cheeks and a distinctly small mouth. The long nose joins at its root to the angular but unmarked eyebrows. The eyes are obliquely incised, the pupil is indicated by a prick. A plain ear-disc adorns the right ear. A vertically striped ribbon is laid along the forehead in the centre of which a round ornament is applied.
The stylistic features are those of the late Kṣatrapa period (cp. Part I, TERR.HUM.FIG.,nos. 86 ff.).
Size: H. 6.5 cm. Colour: red.
No. So IV 292. FS. 6 IV 11.7/Cc 13.26, H. 14.62 m.

10. Human head, presumably male. Sharp-cut face with deep-set eyes and thin-lipped mouth. The preserved left eye shows a protruding eyeball. Along the extremely narrow forehead lies a vertically striped ribbon which is part of a head-dress that covers the hair. The ears are mutilated.

Stylistically the head is of late Kṣatrapa origin.
Size: H. 7.3 cm. Colour: brick-red.
No. So IV 167. FS. 6 IV 7.4/Cc 12.0, H. 15.32 m.

11. Mutilated head of a human figure. The pupils of the prominent deep-set eyes are marked by large pricks in the eyeball. To the sides of an indistinct, applied mark above the nose runs a sharply incised brow-line (?) towards the ears now lost. Above the forehead are preserved traces of a decorated ribbon or some sort of a crown.
Stylistically the head belongs to the Early Kuṣāṇa period.
Size: H. 8.9 cm. Colour: red-brown.
No. So IV 328. FS. 6 IV 16.20/Cc 2.03, H. 14.95 m.

12. Seated Mother Goddess figure with a child. The bottle-shaped body is wheel-thrown, the extremities are applied. The round face shows a sharp-ridged nose, large impressed eyes with pricked eyeball, a thin-lipped mouth, and ears protruding sidewards, which are decorated with plain ear-discs. Upon the narrow forehead arises a band with vertically incised strokes, presumably indicating hair. A similarly striped necklace extends from shoulder to shoulder, resting on the breasts.
The elbow of the right arm rests on the right knee, the hand is raised with the palm turned inwards. In the left arm is placed a stiffly made child. Arms and legs are adorned with one bangle and anklet each. Between the crude legs a bowl for offerings is placed. The back is undecorated.
Size: H. 21.0 cm. Diam. 12.0 cm. Colour: red.
No. So IV 112. FS. 6 III 11.0/Cc 14.74, H. 14.80 m.

13. Boyish figure with hands on breast. The round face shows impressed eyes and pricked pupils, a strong nose with nostrils and sharp folds incised to the sides of the mouth. A broad collar stretches from shoulder to shoulder. Two bangles adorn the wrists. A girdle holds the short garment indicated by horizontally incised folds reaching from the hips to the knees. The diaphanous cloth can not hide the genitals of the boy.
The piece is slightly curved backwards and is, therefore, to be taken as a handle. It is not belonging to the group of Boyish Figures of the main excavation (nos. 156–161) but of the same Kuṣāṇa origin.
Size: H. 9.8 cm. Colour: brown.
No. So IV 29. FS. 6 IV 14.60/Cc 13.55, H. 14.79 m.

2) Animal figures

14. Fragment of a nāga-hood consisting of the remains of six slender snake bodies of which two have preserved the heads. This is undoubtedly a theriomorphic hood with originally seven snake heads.
Size: 7.1 × 6.3 × 2.0 cm. Colour: brick-red.
No. So IV 303. FS. 6 IV 13.78/Cc 18.23, H. 14.80 m.

15. Fragment of a nāga-hood consisting of the remains of five snake bodies. The piece is strongly chaff-tempered and shows no details anymore. As no. 14, it is a theriomorphic hood.
Size: 6.0 × 3.2 × 1.8 cm. Colour: light brown.
No. So IV 389. FS. 6 IV 11.2/Cc 10.4, H. 15.17 m.

16. Head of a cobra with incised nostrils, mouth, split tongue and horizontal strokes indicating skin-folds.
Size: 5.6 × 4.6 × 3.5 cm. Colour: light brown.
No. So IV 329. FS. 6 IV 10.78/Cc 14.53, H. 14.62 m.

17. Head of a cobra with round eyes and protruding eyeballs. The mouth, tongue and folds of the hood are marked by incised strokes.
Size: 3.6 × 4.1 × 2.9 cm. Colour: light brown.
No. So IV 80. FS. 6 IV 12.0/Cc 8.2, H. 14.65 m.

18. Head of a snake with pierced eyes and mouth.
Size: 5.9 × 2.4 × 1.8 cm. Colour: grey.
No. So IV 105. FS. 6 IV 2.5/Cc 6.0, H. 16.10 m.

19. Fragment of an elephant. Front-part with bulgy head, small rhomboid eyes, incised skin-folds and applied right ear. The root-sheaths of the tusks are empty. The trunk swings from left to right.
Size: H. 9.1 cm. L. 15.1 cm. B. 6.9 cm. Colour: brown.
No. So IV 436. FS. 6 IV 7.53/Cb 14.97, H. 15.31 m.

20. Head of a bull with curved horns, applied eyes and pricked pupils and nostrils. The dewlap is clearly worked out. On the cheek clings a fragment of an indistinct object.
Size: 5.8 × 4.6 × 4.1 cm. Colour: brick-red.
No. So IV 425. FS. 6 IV 0.5–7.4/Cc 9.5–10.5, H. 14.98–14.60 m.

21. Headless fragment of a bull with large pierced hump.
Size: L. 4.1 cm. H. 4.3 cm. Colour: dark grey.
No. So IV 210. FS. 6 IV 3.5/Cc 6.0, H. 15.20 m.

22. Weather-worn fragment of a ram.
Size: L. 6.0 cm. H. 4.8 cm. Colour: red.
No. So IV 179. FS. 6 IV 0.5/Cc 17.5, H. 15.20 m.

23. Head and neck of a duck. Perhaps spout of a vessel.
Size: H. 9.6 cm. Colour: red.
No. So IV 301. FS. 6 IV 11.6/Cc 14.15, H. 14.70 m.

E. MISCELLANEOUS TERRACOTTA OBJECTS

1. Mutilated object with three rectangular seal impressions containing two lines of script. The elevated central part shows a perforation. The inscription in the three impressed fields are identical. The text is written in Kuṣāṇa Brāhmī and reads:
L.1 .. .. .. *putrasa*
L.2 *abik[o]śikasa*
Size: max. 4.0 × 3.4 × 2.4 cm.
No. So IV 357. FS. 6 III 10.5–19.5/Cd 4.0–6.0, H. 14.90–14.60 m.

2. Seal impression on wheel-shaped object. A convex *triśūla* extends over the whole disc. It remains unclear whether the elevation in the centre is modelled.
Diam. 1.9 cm. D. 0.95 cm.
No. So IV 243. FS. 6 IV 12.5/Cc 13.7, H. 15.45 m.

3. Pottery stamp with sharply cut *nandyāvarta* symbol.
Diam. 2.7 cm.
No. So IV 393. FS. 6 IV 3.2/Cc 9.6, H. 14.68 m.

4. Pottery stamp with perforated conical handle showing a sharply cut *haṃsa*.
Size: 3.7 × 3.4 × 3.7 cm.
No. So IV 290. FS. 6 IV 2.7/Cc 10.5, H. 15.25 m.

5. Large stamp with knob-shaped handle. Three decorated concentric rings encircle a lotus rosette.
Diam. 11.65 cm. H. 3.0 cm. Colour: brick-red.
No. So IV 147. FS. 6 IV 6.85/Cc 8.45, H. 15.65 m.

6. Stopper with blossom-shaped top and tapering shaft.
Size: H. 5.85 cm. Colour: brown. No. So IV 324.
FS. 6 IV 0.5–9.5/Cc 7.5–9.5, H. 14.90–14.60 m.

7. Plain reel; short concave; both sides flat.
∅ 3.0 cm. Ht.1.7 cm. Colour: brown. No. So IV 126.
FS. 6 IV 0.5–2.9/Cb 15.5–17.5, H. 15.45–15.15 m.

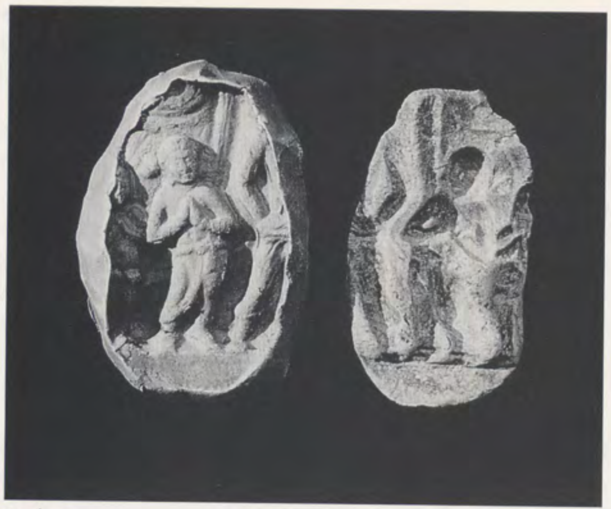
8. Double-convex wheel with on both sides protruding hub.
Diam. 3.9 cm. Colour: brick-red.
So IV 201. FS. 6 IV 6.5/Cc 18.2, H. 15.20 m.

9. Double-convex wheel with protruding hubs. Incised oblique strokes on obverse.
Diam. 4.0 cm. D. 1.4 cm. Colour: brick-red.
No. So IV 322. FS. 6 III 11.2/Cd 2.5, H. 15.25 m.

10. Spherical ball with incised segmenting lines (melon-shaped).
Diam. 1.8 cm. Colour: brown.
No. So IV 426. FS. 6 IV 0.5/Cc 9.5, H. 15.30 m.

11. Fragment of presumably rectangular skin-rubber with punctured surface on one side.
Size: 6.1 × 4.2 × 1.5 cm. Colour: brown.
No. So IV 202. FS. 6 IV 1.54/Cd 0.70, H 14.98 m.

12. Fragment of round skin-rubber with criss-cross incised surface on one side.
Size: 7.3 × 4.7 × 1.8 cm.
No. So IV 184. FS. 6 IV 5.0/Cc 16.0, H. 15.20 m.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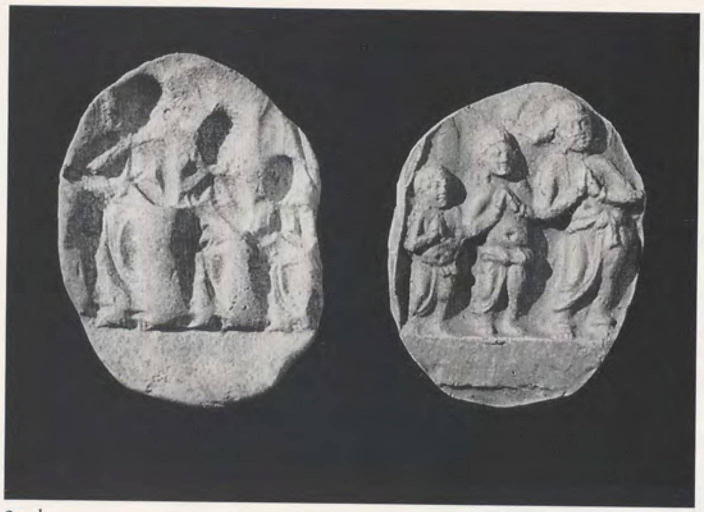
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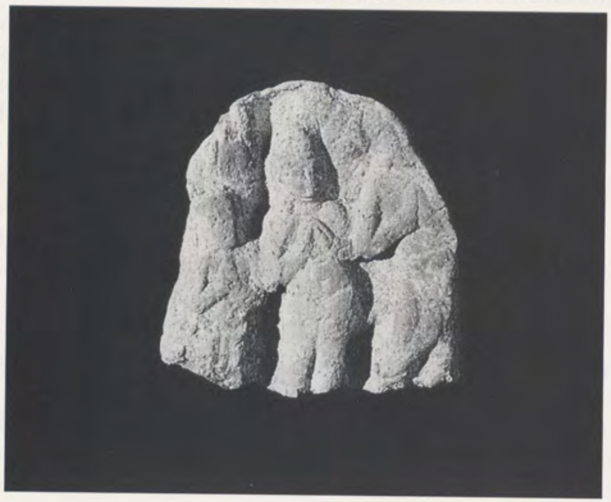
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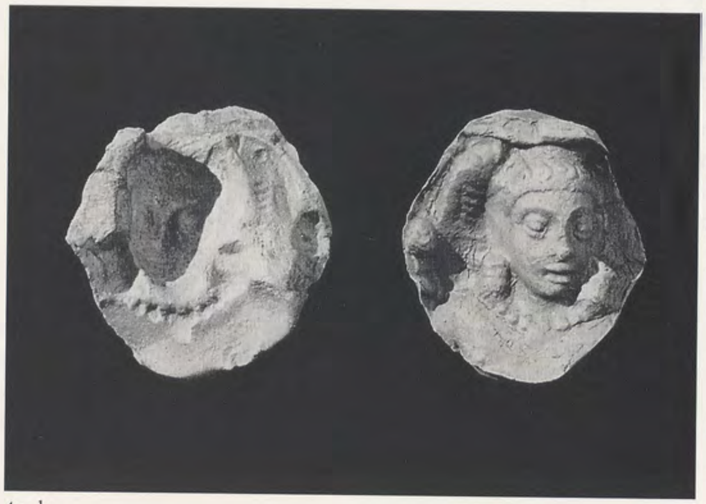
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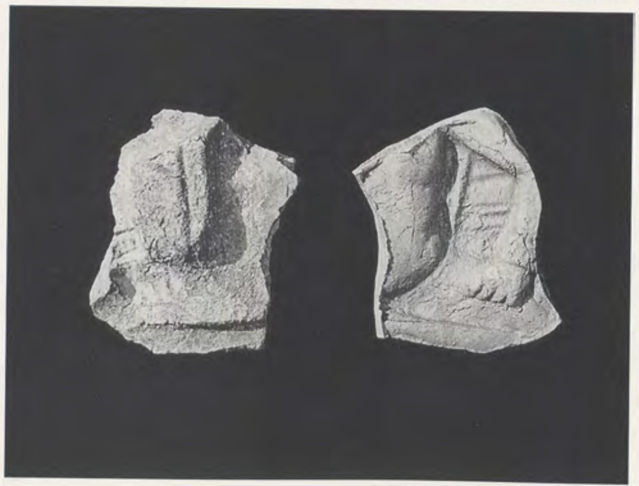
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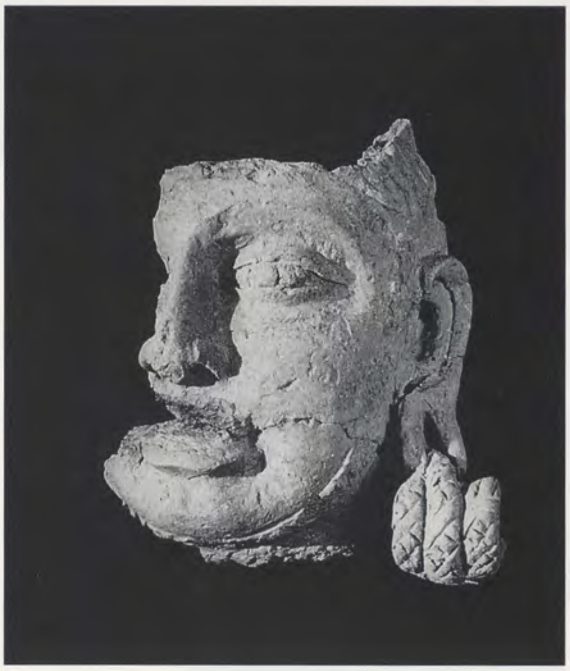
Terracotta Objects, Moulds and Human Figurines



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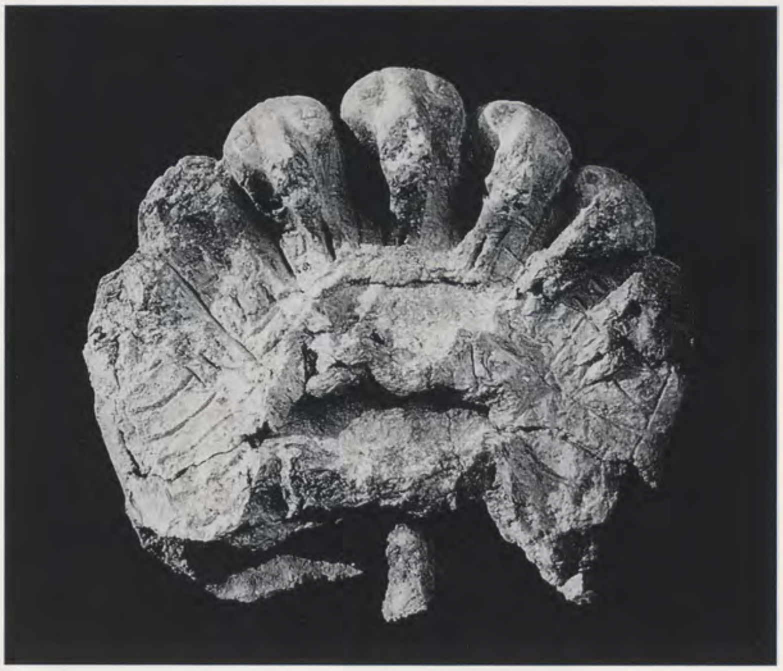

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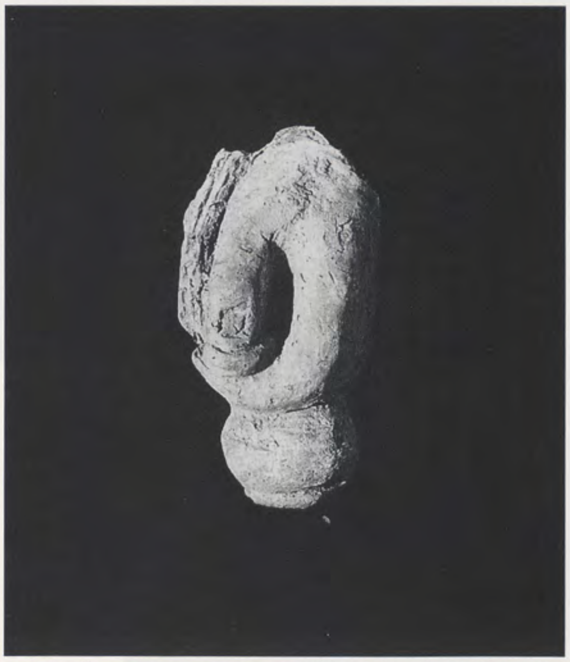

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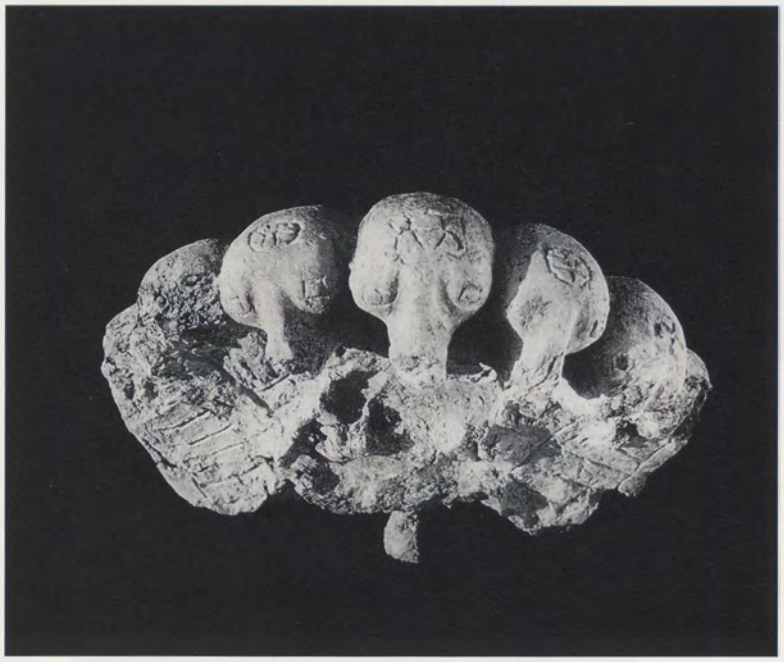

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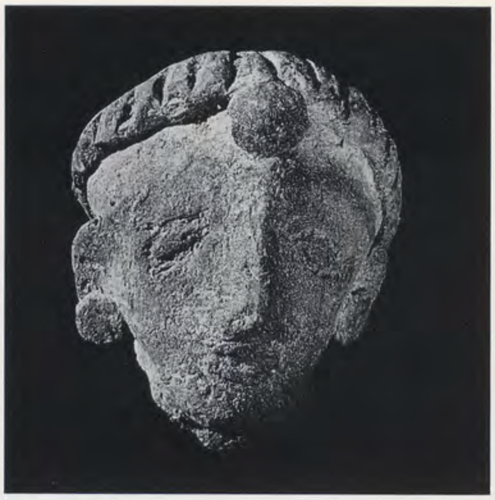
Terracotta Objects, Human Figurines



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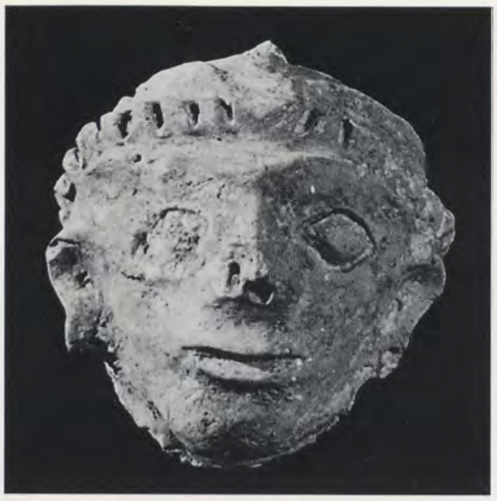

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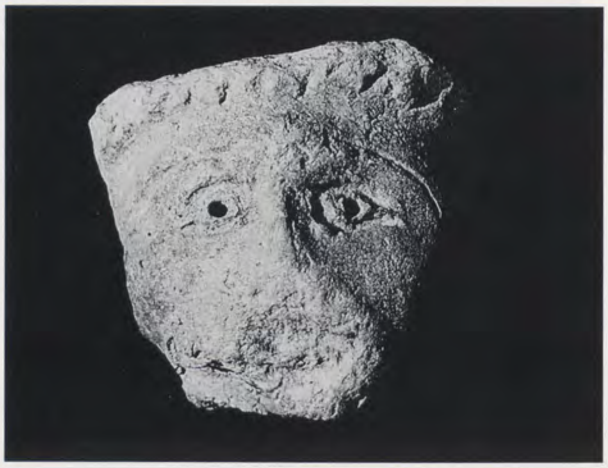

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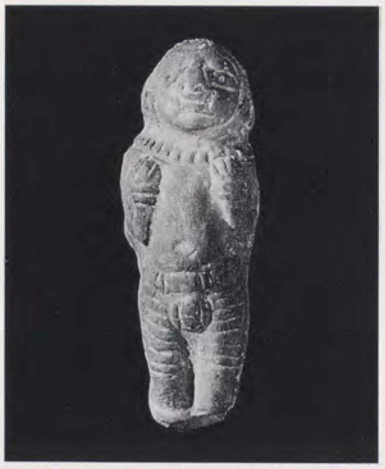

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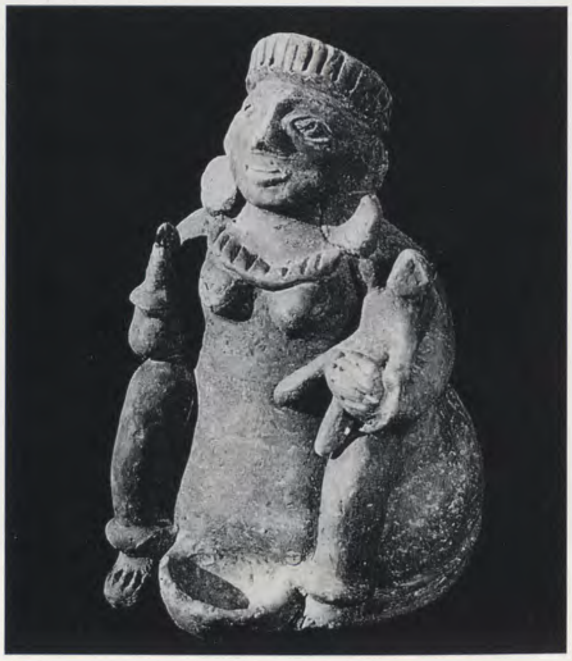

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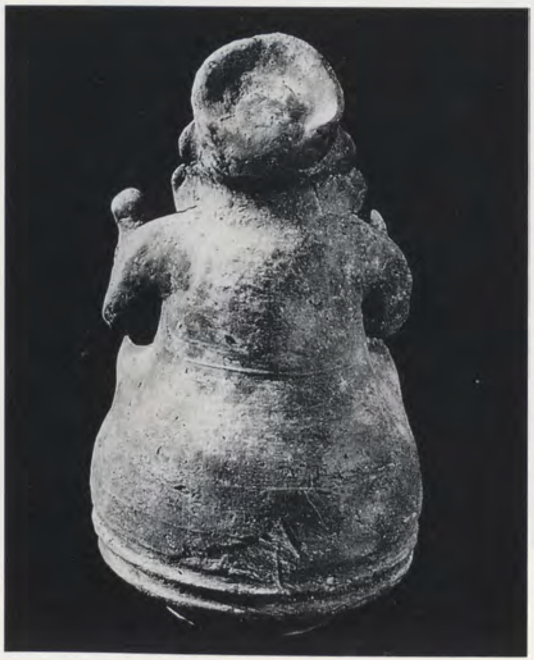

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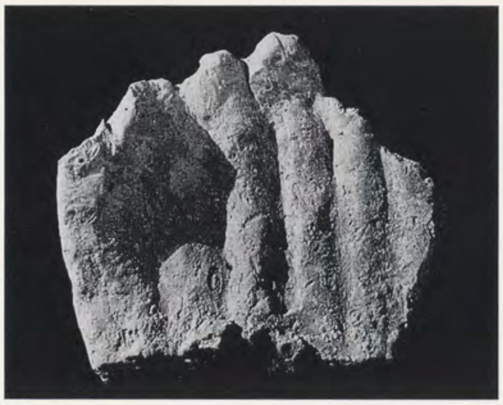
Terracotta Objects, Human Figurines



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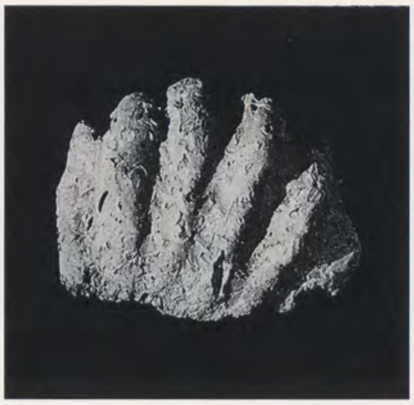

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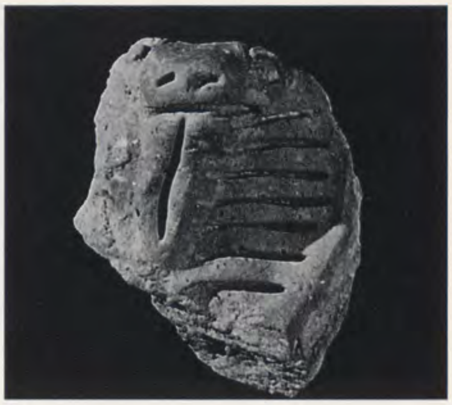

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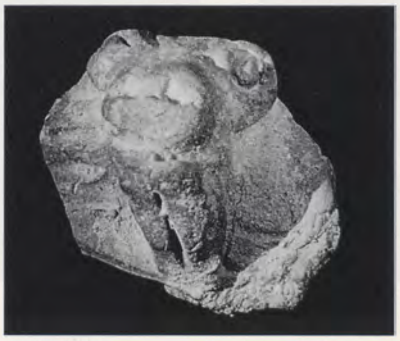

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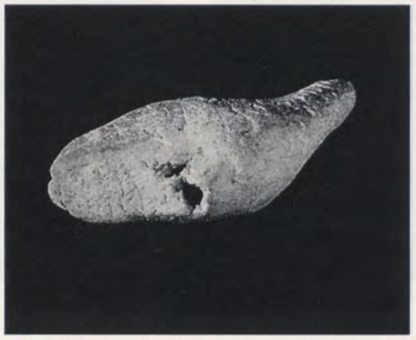

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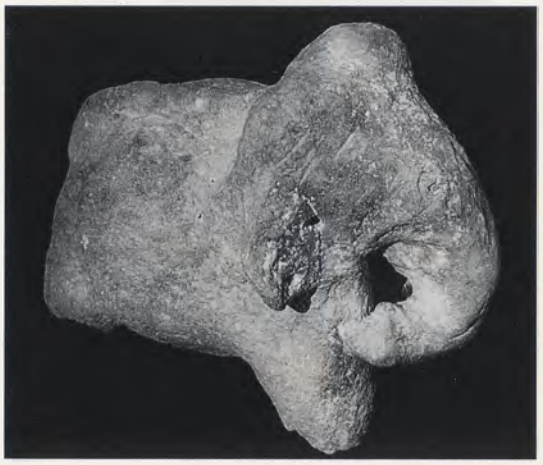

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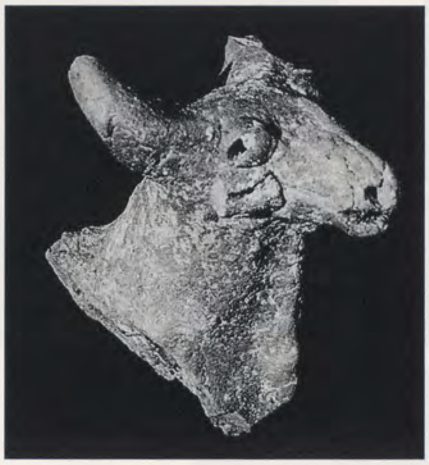

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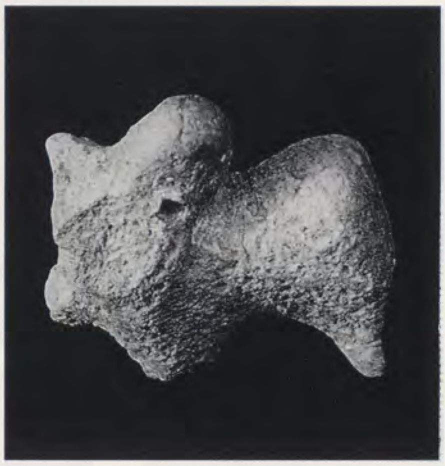

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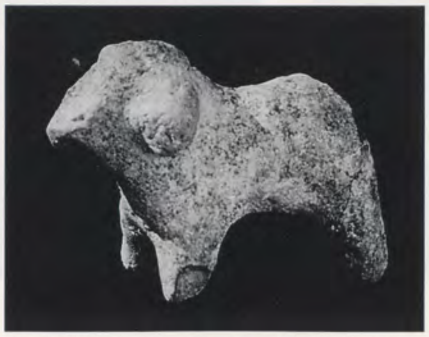

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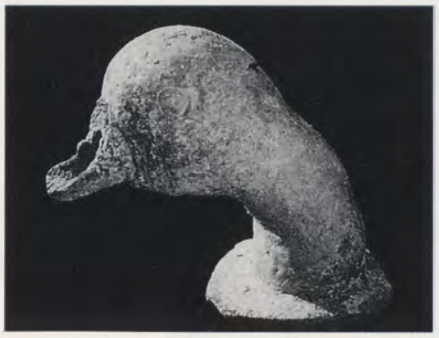

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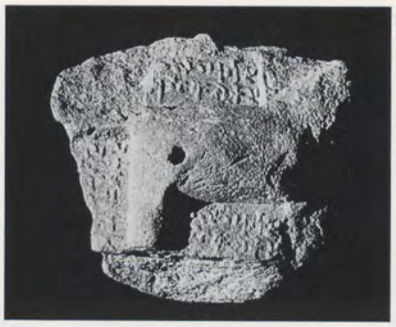
Terracotta Objects, Animal Figurines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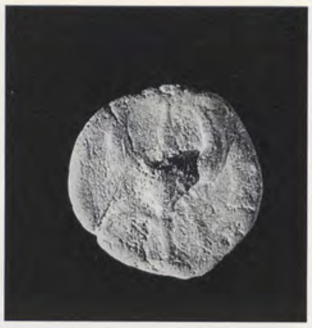
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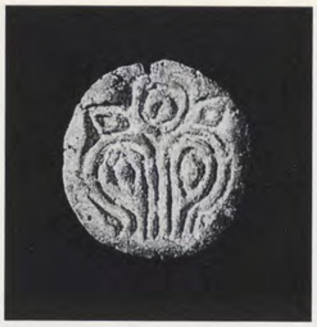
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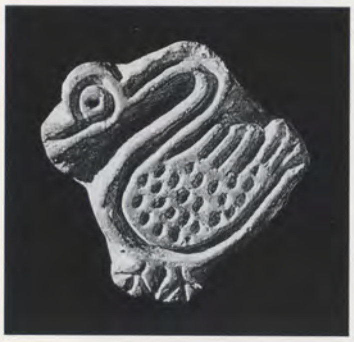
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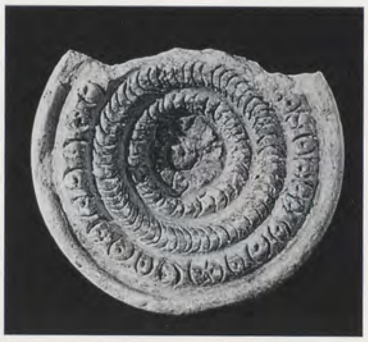
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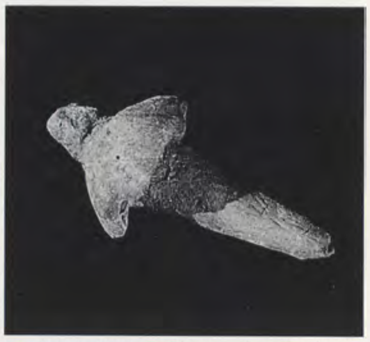
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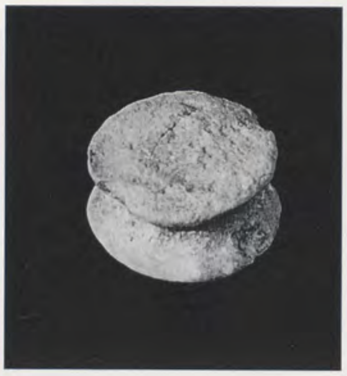
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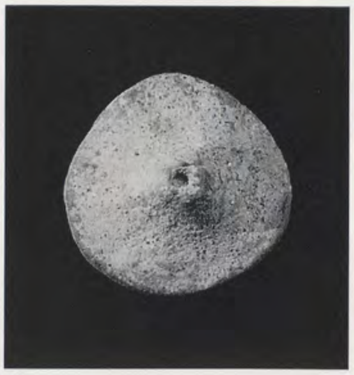
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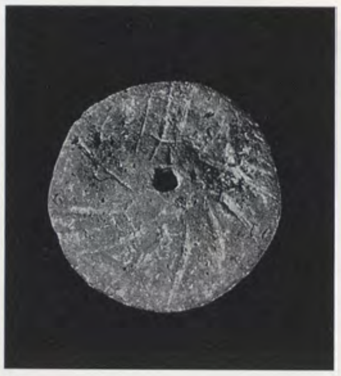
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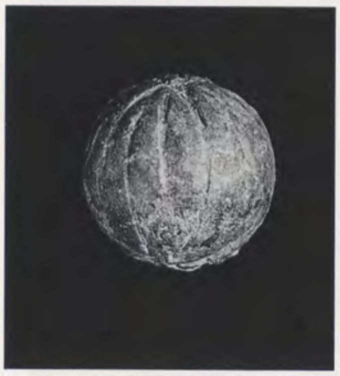
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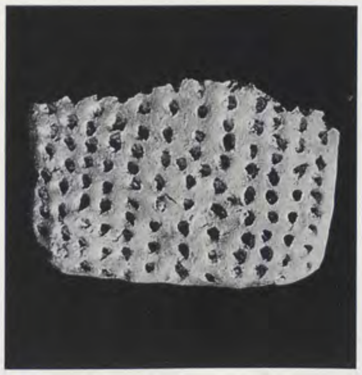
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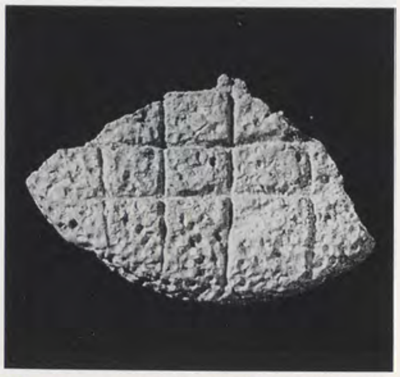

12

Miscellaneous Terracotta Objects

F. MISCELLANEOUS OBJECTS OF METAL, BONE AND STONE

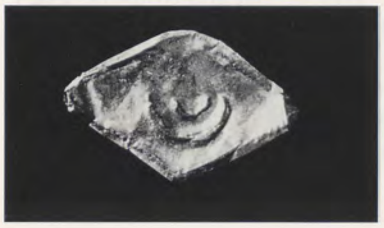
1. Thin small rhomboid gold foil embossed with two concentric semicircles in the centre and a framing line of dots along the edge.
Size: 1.75 × 2.70 cm.
No. So I 278. FS. 6 IV 14.25/Ca 1.35, H. 14.80 m.

2. Crushed bead of gold foil. The originally hollow lenticular bead shows on both ends a stiffened rim for the take-up of the thread.
Size: L. ca 2.2 cm. H. ca 1.0 cm.
No. So I 280. FS. 6 III 6.0/Cb 19.9, H. 15.02 m.

3. Stylus of bone with a carved hand on one end. The tips of the fingers are turned towards the palm, but the incised horizontal strokes are indicating finger nails. The wrist is decorated with three bangles.
Sizes: L. 10.4 cm. B. (hand) 1.3 cm.
No. So I 279. FS. 6 IV 17.05/Cc 1.2, H. 14.75 m.

4 Steatite bowl, hemispherical, upper wall grooved, direct sharp-edged rim bordered by two thin grooves on the outside.
Diam. 3.6 cm. Colour: white-pink.
No. So IV 113. FS. 6 IV 7.85/Cc 3.7, H. 15.85 m.

5. Fragment of a sandstone bowl decorated with incised pointed lotus petals and a borderline of triangular notches on the outside.
Size: 9.1 × 5.2 × 1.9 cm. Colour: whitish.
No. So IV 205. FS. 6 III 10.2/Cd 0.78, H. 15.22 m.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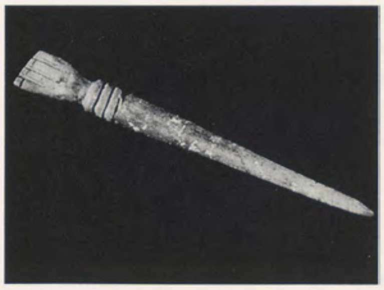
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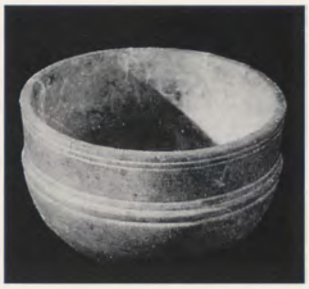
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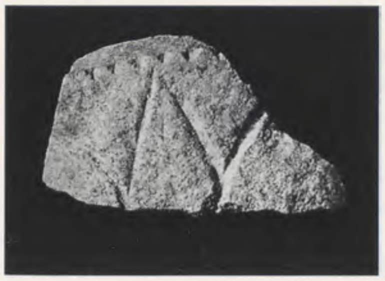
5

G. COINS

Wima Kadphises

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1. *Obv*. Corroded king standing l. sacrificing at altar.
Rev. Corroded Śiva facing standing before bull r.
Size 2.69–2.74 × 0.42 cm. Wt 17.029 gm. Shape: circular.
No. So III H 235. FS. 6 IV 12.38/Cc 9.50, H. 15.80 m.
Publ. R. Göbl 1984: no. 762/20.

2. *Obv*. King standing l. sacrificing at altar.
Rev. Corroded Śiva facing standing before bull r.
Size 2.75–3.08 × 0.41 cm. Wt 16.920 gm. Shape: circular.
No. So III H 298. FS. 6 III 17.3/Cb 17.5, H. 16.50 m.
Type R. Göbl 1984: no. 762.

Kaniṣka

Æ

3. *Obv*. King standing facing l., clad in coat and trousers. He holds in r. hand elephant-goad (*aṅkuśa*) over altar; in his l. hand long-shafted spear.
Rev. Śiva standing l., nimbate, has four arms and hands with corroded attributes.
Size 2.47–2.66 × 0.47–0.58 cm. Wt 17.381 gm. Shape: circular.
No. So III H 299. FS. 6 III 17.3/Cb 17.5, H. 16.50 m.
Type R. Göbl 1984: no. 781.
The coins nos. 2 and 3 have been found sticking together in one of the brick-foundations of the upper row of pillars along the wall of the Apsidal Temple no. 2.

4. *Obv*. King standing facing l., clad in coat and trousers. The r. hand is extended over altar; in his l. hand long-shafted spear.
Rev. Male deity (MAO) to l., nimbate, r. arm stretched l.
Size 2.60–2.75 × 0.46 cm. Wt 16.365 gm. Shape circular.
No. So III H 164. FS. 6 IV 15.2/Cc 0.6, H. 14.60 m.
Publ. R. Göbl 1984: no. 774/14.

Huviṣka

Æ

5. *Obv*. Corroded
Rev. Male deity (MAO), large crescent behind shoulders, r. arm advanced, l. hand grasps sword.
Size 2.14–2.20 × 0.30 cm. Wt 6.266 gm. Shape: circular.
No. So III H 234. FS. 6 IV 3.86/Cc 13.62, H. 15.00 m.
Publ. R. Göbl 1984: no. 975/7.

Æ

6. *Obv*.: Male figure standing to front wearing short tunic, trousers and boots. Long hair covers the head and hangs down to his shoulders. His half-raised left hand holds a long staff with truncated top and waving banner. The right arm is akimbo placed on the hip. On the right (and bottom?) side appears an incuse line. On the left, i.e, from VIII upto XI an inscription in Brāhmī characters occurs, reading *Huviṣkasya*.
Rev.: A tree with full crown of twigs and leaves on the left side. To the right two horizontal lines of Brāhmī script with three letters each:
L.1 *[pu]tra ka*
L.2 *ṇ(i)kas[y]a*
Size 2.16–2.19 × 0.64 cm. Wt 8.696 gm. Shape: circular
No. So III H 188. FS. 6 III 17.8/Cc 1.1, H. 14.23 m.

This coin is a unique specimen of historical importance and has been published and discussed already by P. L. Gupta (1973), B. N. Mukherjee (1973), *and listed by* R. Göbl (1984) *under* no. 984 *as a local issue. In any case, it proves difficult to bring the two parts of inscription in a line that makes sense.* P. L. Gupta (1973, p. 125) *discusses this very point when he argues: "The only problem is, who was the issuer of this coin? The legend may have dual interpretation. If the two parts of the legend on the two sides are taken in continuation, beginning from the obverse and ending on the reverse, it would mean that* Kaṇika *was the issuer of the coin and he was the son of* Huviṣka. *But if the two parts of the legend be taken as separate, it may then be interpreted as* ”of Huviṣka“ *and* ”son of Kaṇika“. *In that case, the name on the obverse, i.e.* Huviṣka *would be that of the issuer and then according to the reverse legend, he would be the son of* Kaṇika. *But this latter interpretation seems unlikely as* putra Kaṇikasya *in the sense of* ”son of Kaṇika“ *is an unusual construction; proper construction in this sense would be* Kaṇikasya putra. *So, here the* putra *should go with* Huviṣkasya. *As such, I believe that the issuer of this coin was* ”Kaṇika, the son of Huviṣka.“

B. N. Mukherjee (1973, p. 6) *holds the same opinion, but while* P. L. Gupta *comes to the conclusion that the* Kaṇika *of the coin is Kaniṣka I, the son of an (unknown) Huviṣka "who might or might not have been ruler at any time"*, B.N.Mukherjee *argues that "the only Kuṣāṇa monarch with whom the ruler concerned can be identified is Kaniṣka III, the successor of Vāsudeva I".*

The author is not convinced of any of these conclusions. The arguments do not answer the crucial question about the purpose *of this very special issue. It is certainly not a piece of the imperial Kuṣāṇa currency but rather a sort of medal coined on the occasion of an important event. The tree on the reverse might, for instance, stand for* Birth. *In any case, the main person is not necessarily the issuer of the medal but the one to whom it is dedicated. He would have to appear on the obverse which in the copper piece in question is undoubtedly the side with the male figure accompanied by the inscribed name* Huviṣka. *This name is, as one would expect, written in the genitive. Should one now take the two parts of the legend as separate, and should the first two akṣaras on the reverse really to be read as* pu *(and not as* sa), *then the wording* putra Kaṇikasya *is in fact disturbing. In this case, one expects of course* Kaṇikaputrasya *or* Kaṇikasya putra. *But was the designer of our coin or medal aware of such a rule? As far as the author knows, there exists no other coin with a Brāhmī inscription mentioning the fathers name and written in two parts on the obverse and reverse. The* putra Kaṇikasya *in the sense of "son of Kaṇika" is in fact an unusual construction, but is it really impossible? To think with* P. L. Gupta *of an unknown* Huviṣka *who is the father of* Kaniṣka I, *or with* B. N. Mukherjee *(for whom* Vāsiṣka *is the father of* Kaniṣka II*) of a likewise unknown* Huviṣka *as the father of* Kaniṣka III *is equally unlikely. One should not, in spite of the unusual wording of the inscription, exclude the possibility that this is a medal for* Huviṣka, *the* son of Kaniṣka (I). *The findspot in the surroundings of the Apsidal Temple 2, and the palaeography of the script offer no objection against such an interpretation.*

Vīrasena

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7. *Obv*.: On top Brāhmī letters *..ras(e[na]..* Below: tree in railing between *nandyāvarta* symbol r. and l.
Rev.: Crude standing figure of Lakṣmī holding stalk of flower in her r. hand.
Size 1.31 × 1.09 × 0.23 cm. Wt 1.746 gm. Rectangular.
No. So III H 162. FS. 6 III 6.7/Cb 9.5, H. 14.50 m.

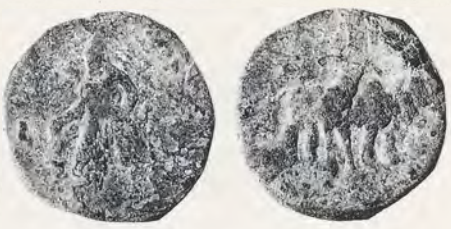
8. *Obv*.: On top *[vi]ras[e]na[sa]*. Below: tree in railing between *nandyāvarta* symbol r. and l.
Rev.: Corroded.
Size 1.21 × 1.17 × 0.21 cm. Wt 1.373 gm. Rectangular.
No. So III H 160. FS. Surface, modern temple area.

9. *Obv*.: On top *..ras[ena]|||*. Below: tree in railing between *nandyāvarta* symbol r. and l. partly.
Rev.: Corroded.
Size 1.42 × 1.17 × 0.22 cm. Wt 2.214 gm. Rectangular.
No. So III H 161. FS.6 III 8.0–9.5/Cb 8.0–9.5, H. 14.75 m.

AR *Vināyakapāla I*

10. *Obv*.: Corroded figure of anthropoid boar.
Rev.: Legend *|||[ya]ka|||*
Size 1.77 × 1.45 × 0.29 cm. Wt 3.929 gm. Circular.
No. So III H 233. FS. Surface find.

AE Native States Bharatpur
11. Sūraj Mall (?). Maha Indrapur. Date: -ry.4. Legend = IMC IV, p. 220.
Size 1.94–2.15 × 0.70 cm. Wt 18.063 gm. Circular.
No. So III H 187. FS. 6 III/Cb, H. 14.75 m.
Note: One more specimen of same type registered under So III H 236.



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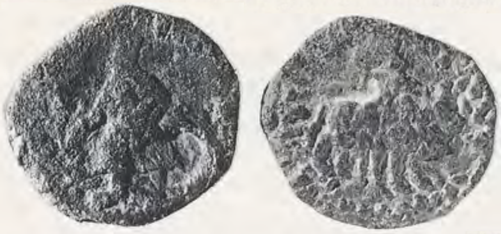

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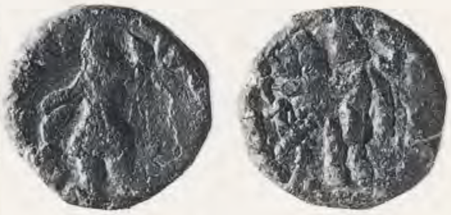

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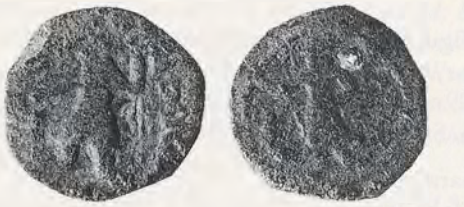

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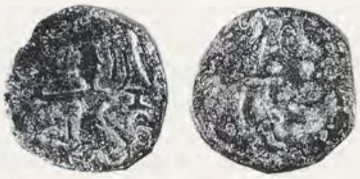

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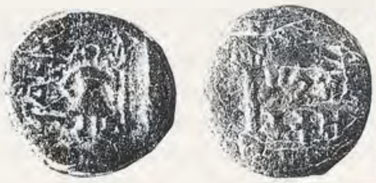

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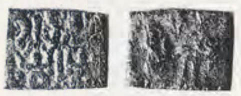

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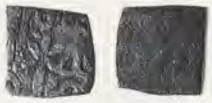

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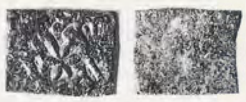

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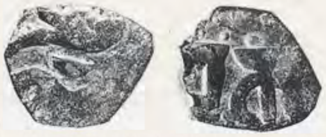

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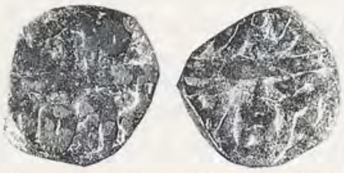

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Part II. Coins. 1/1

H. DECORATED POTTERY

The decorated pottery sherds found in the area of Apsidal temple 2 are all, with a few exceptions, of the stamped Kuṣāṇa variety. There is, as the selected samples show, no remarkable difference to the stamped pattern of the material found in the main excavation area. The exceptions are a few paddle-marked and moulded specimens.

1. Sherd of red ware jar paddled with sets of parallel grooves. 7.1 × 4.9 cm. So IV 136. FS. 6 IV/Cc, H. 15.50 m.

2. Sherd of red ware jar with incised and impressed grooves. 21.2 × 11.0 cm. So IV 221. FS. 6 IV/Cc, H. 14.90 m.

3. Shoulder fragment of red ware jar decorated with stamped hanging leaves between horizontal grooved lines. 13.25 × 10.2 cm. So IV 213. FS. 6 IV/Cc, H. 14.85 m.

4. Sherd of red ware jar stamped with a variation of leaves, rosettes and a V-shaped shoulder band. 7.7 × 5.2 cm. So IV 214. FS. 6 III/Cc, H. 15.30 m.

5. Shoulder fragment of a vessel in red ware decorated with a band of small *nandyāvarta* symbols above and one large such symbol below. 6.0 × 7.4 xm. So IV 119. FS. 6 IV/Cb, H. 15.75 m.

6. Shoulder fragment of a vessel in red ware decorated with stamped leave variations between horizontal grooved lines. 14.7 × 5.6 cm. So IV 399. FS. 6 IV/Cc, H. 14.90 m.

7. Sherd of a jar in red ware showing horizontal grooves and stamped V-shaped patterns as well as semicircular garlands. 7.7 × 5.1 cm. So IV 338. FS. 6 IV/Cd, H. 14.90 m.

8. Sherd of a red ware jar decorated with stamped rosettes, lozenges and arches. 12.0 × 7.1 cm. So IV 135. FS. 6 IV/Cc, H. 15.80 m.

9. Shoulder fragment of a red ware jar decorated with a horizontal chain of broad lotus petals and a large stamped *śrīvatsa*. 9.9 × 8.1 cm. So IV 161. FS. 6 IV/Cc, H. 15.50 m.

10. Shoulder fragment of a red ware jar showing lines of small and large stamped rosettes and a band of oblique notched grooves. 10.5 × 8.6 cm. So IV 337. FS. 6 IV/Cc, H. 14.85 m.

11. Sherd of a red ware jar decorated with bands of stamped stars, and notches arranged in semicircles. 5.8 × 3.1 cm. SoIV 220. 6 III/Cc.

12. Fragment of a moulded red ware vessel decorated with floral and geometrical patterns. 4.5 × 4.0 cm. So IV 144. FS.6 IV/Cc,15.50 m.

I. POTTERY OBJECTS

In the area of Apsidal Temple no. 2 a few ceramic objects have been found among the pottery the function of which is not entirely clear. They probably have been used as or were part of pinnacles. Special attention must be given to object no. 1 because of its green glaze of undoubtedly Kuṣāṇa origin. Here as well as in a number of other pottery fragments the glaze is a blue-green copper one, originally shining and semitransparent, now corroded and opaque. This glaze is based on lead, with copper and iron combinations as colouring agents.

The iron bell depicted along with no. 2 has been found in the mud filling within this pipe. The remains of the clapper are clinging to the corroded inner side.

Along with these objects have been recovered seven pieces of roof-tiles, all quite fragmentary, but of the same type and size as those found in Level 27 of the main excavation area. In absence of a complete set of photographs the three pieces depicted here may stand for all (nos. 5–6).

1. Tubular object (pinnacle?) having a gallery around its middle part, at one end a double cordon. Light brick-red, exterior green-glazed, medium fine fabric.
Ht. 25.3 cm, Diam. 16.9 cm. No. So IV 363.
Note: One more fragment of a glazed object registered under So IV 349.

2. Fragment of a tubular object (pinnacle?) with two serrated ridges. Exterior brick-red, interior grey, medium coarse fabric. It was found with an iron bell inside.
Ht. 28.0 cm, Diam. 12.0 cm. No. So IV 118, 118a.
Note: One more fragment registered under So IV 375.

3. Fragmentary slightly conical pinnacle (?) with grooved and notched ridges. Brick-red, medium coarse fabric.
Ht. 24.4 cm, Diam. 15.3 cm. No. So IV 439.

4. Conical object with the remains of eight handle-like appendices. Presumably the top of a pinnacle. Decorated with grooves and a notched cordon. The cone is solid. Brick-red, medium coarse fabric.
Ht. 13.4 cm, Diam. 12.5 cm. No. So IV 445.

5. Two fragments of burnt roof-tiles, one showing carefully made grooves on the upper side, the other being preserved in its lower side only.
Size: 19.2 × 17.6 × 3.1 cm and 11.7 × 11.9 × 3.5 cm.
Nos.So III G 153 + 156. FS. 6 III 11.5/Cb 14.8, H. 15.09 m.
Note: Five more tile fragments registered under So III G 152; 154; 155; 157; 158.

6. Fragment of burnt brick with wide groove.
Size: 26.8 × 24.0 × 6.0 cm.
No. So III G 160. FS. as no. 5

J. POTTERY

1. Fragment of globular jar, short concave neck, grooved collar-rim, thin cordon on shoulder. Ochre, fine fabric. No. So II 2552.

2. Fragment of jar, recurved neck, corrugated collar-rim, two grooves on neck, thin cordon at base of neck, stamped *nandyāvarta* on shoulder. Brick-red, medium fine fabric. No. So II 2550.

3. Jar, globular, short wide concave neck, beaked and in-beaded rim, stamped *nandyāvartas* in groups of three on upper trunk. Brick-red, fine fabric. No. So II 2572.

4. Fragment of jug, globular, concave funnel neck, rim concave, beaked, two grooves on shoulder, eared loop-handle. Brick-red, medium fine fabric, core unoxidized. No. So II 2559.

5. Jarlet, sharply carinated, almost biconical, plain short funnel-rim, flat base. Brick-red, fine fabric, corroded. No. So II 2502

6. Jarlet, double-carinated, beaked rim, flat base. Brick-red, fine fabric. No. So II 2538.

7. Cup, heart-shaped profile, nearly cylindrical neck with plain rim, narrow flat base. Ochre, fine fabric. No. So II 2372.

8. Small jar, globular, wide steep funnel-neck, angular, slightly inbevelled rim, flat base. Brick-red, fine fabric. No. So II 2321.

9. Jar, globular, funnel-neck with plain rim, three grooves on upper trunk, convex base. Reddish ochre, smooth surface, medium fine fabric. No. So II 2746.

10. Small jar, bulging and carinated wall, funnel-neck with bevelled rim, flat base. Brick-red, fine fabric. No. So II 2366.

11. Beaker, bulging wall, recurved neck, beaded rim, flat base. Brick-red, fine fabric. No. So II 2563.

12. Big spherical jar, recurved neck, band-rim, relatively thin wall. Light brick-red, medium fine fabric, core unoxidized. No. So II 2380.

13. Fragment of neck of storage jar, short cylindrical, angular undercut beaked rim, groove at base of neck. Light brick-red, coarse fabric, core unoxidized, hand-modelled. No. So II 2674.

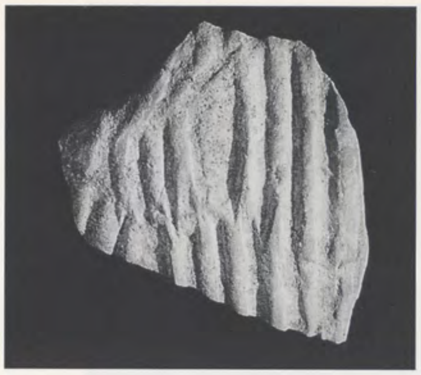
14. Small funnel-bowl, up-curved and stepped tapering rim, protruding foot. Brick-red, medium fine fabric. No. So II 2544.

15. Small funnel-bowl, straight carinated rim. Brick-red, medium fine fabric. No. So II 2471.

16. Fragment of bowl-lid with central knob, horizontal flange with flat top and groove at inner edge, base of knob ringed, base of lid rounded by scraping. Brick-red, fine fabric. No. So II 2581.

17. Pedestal (?), conical, with central part of bowl (?), lower end having four grooves, upper end two grooves. Brick-red, medium fine fabric. No. So II 2371.

18. Fragment of pedestal (?), conical, at lower end five grooves. Light brick-red, green-glazed, fine fabric. No. So 2649.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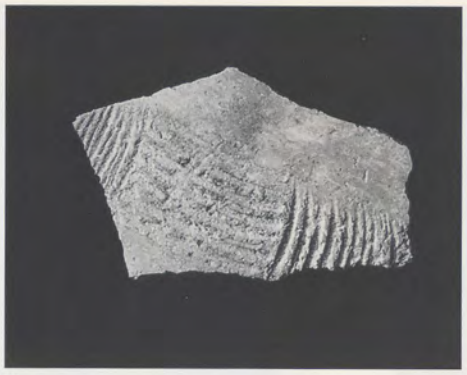
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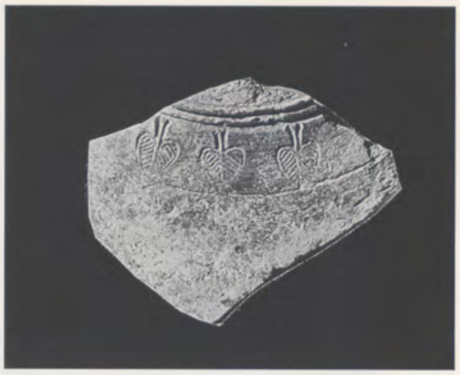
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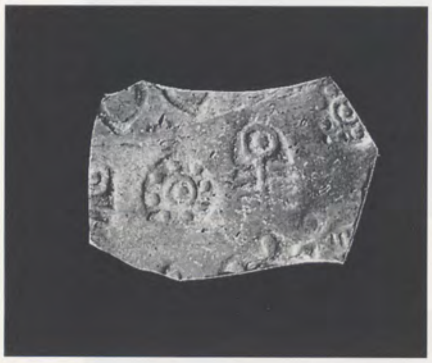
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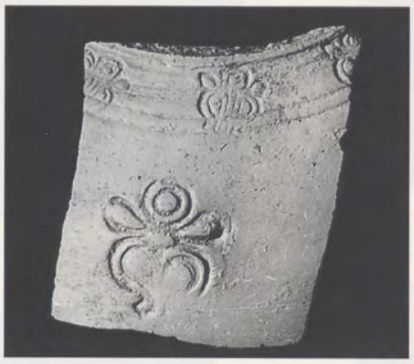
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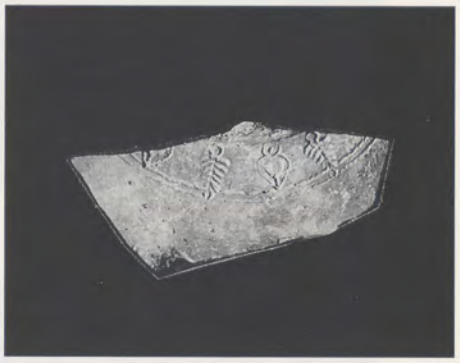
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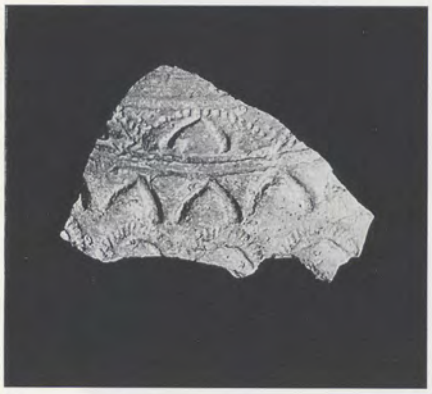
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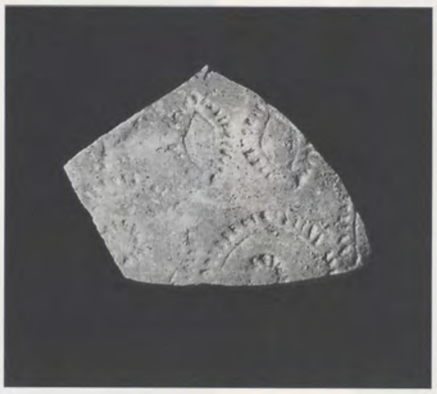
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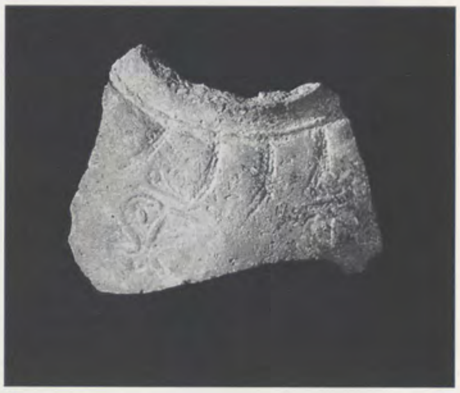
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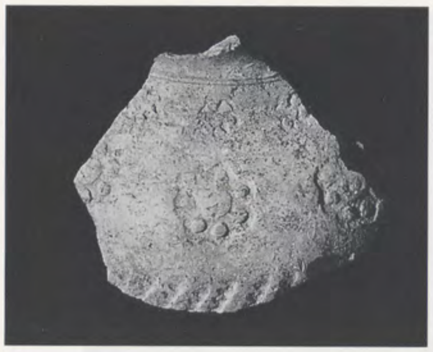
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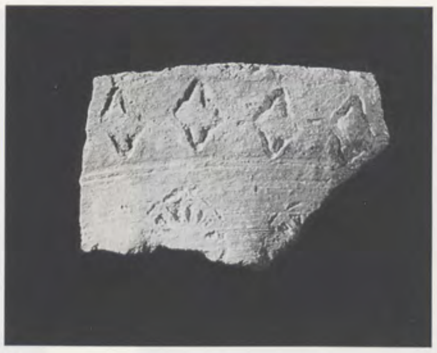
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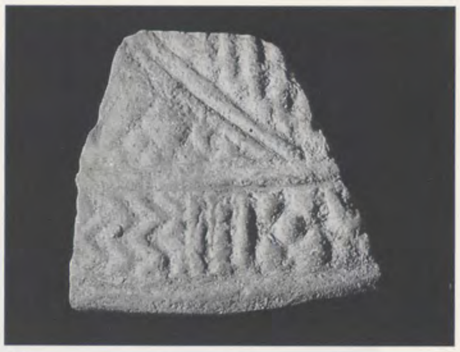
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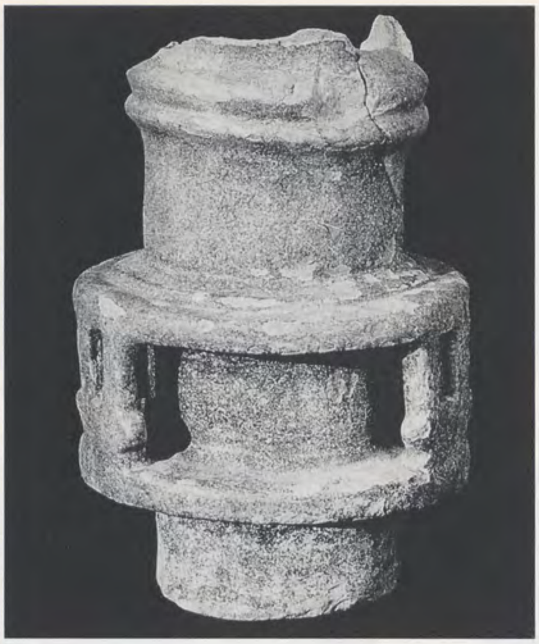

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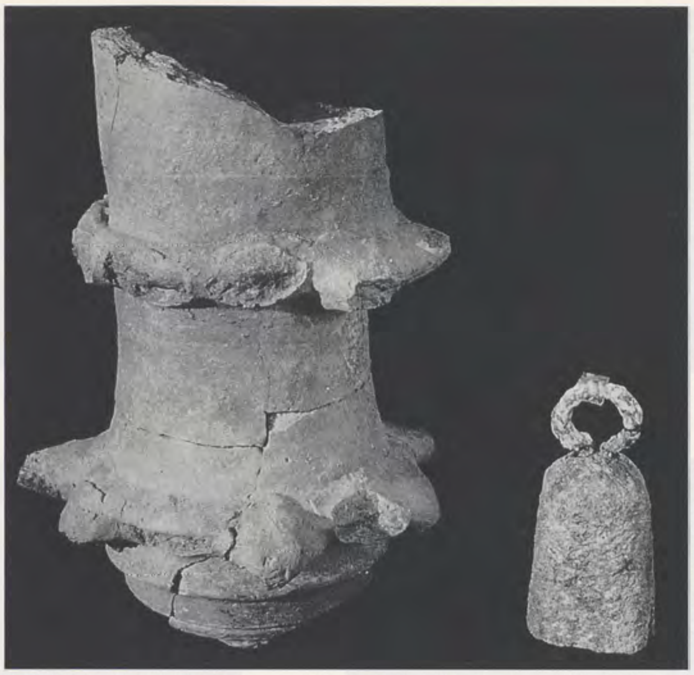

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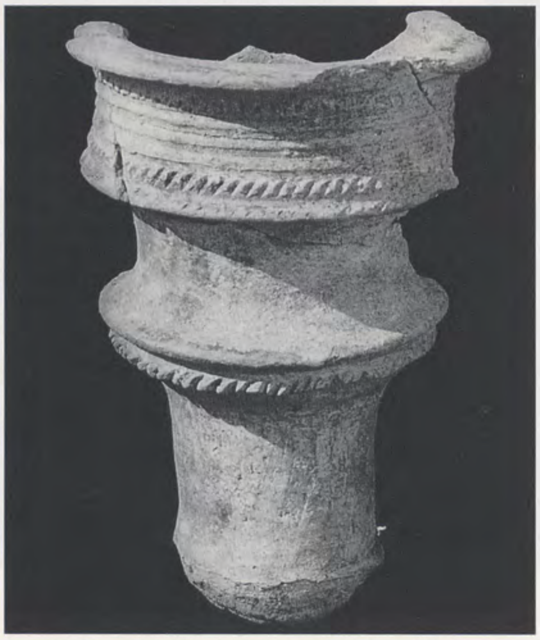

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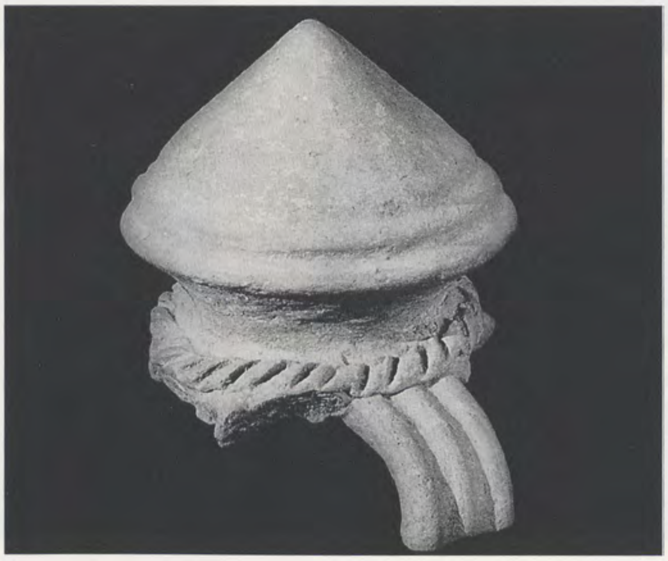

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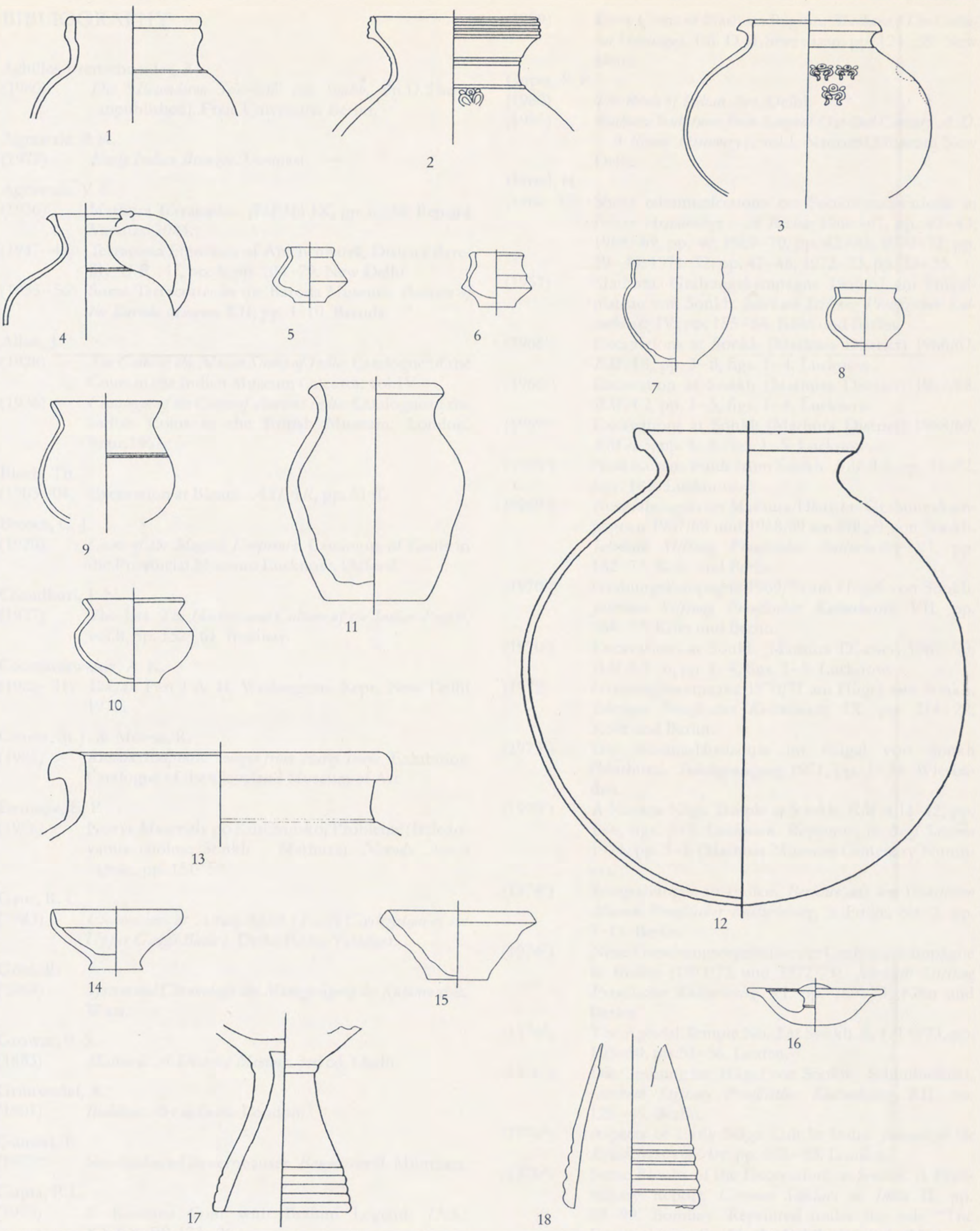
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Pottery from the Site of the Apsidal Temple no. 2. 1/4

BIBLIOGRAPHY

Achilles-Brettschneider, A.
(1980) *Die "Besonderen Scherben" von Sonkh*. Ph.D.Thesis (unpublished). Freie Universität Berlin.

Agrawala, P. K.
(1977) *Early Indian Bronzes*. Varanasi.

Agrawala, V. S.
(1936) Mathura Terracottas. *JUPHS* IX, pp. 6–38, Reprint Varanasi 1984.
(1947–48) Terracotta Figurines of Ahichchhatrā, District Bareilly, U.P. *AI*, no. 4, pp. 104–79. New Delhi.
(1955–56) Some Terracottas in the Baroda Museum. *Bulletin of the Baroda Museum* XII, pp. 1–10. Baroda.

Allan, J.
(1928) *The Coins of the Native States of India*. Catalogue of the Coins in the Indian Museum Calcutta, vol.IV.
(1936) *Catalogue of the Coins of Ancient India*. Catalogue of the Indian Coins in the British Museum. London. Repr.1967.

Bloch, Th.
(1903–04) Excavation at Bāsaṛh. *ASIAR*, pp. 81 ff.

Brown, C. J.
(1920) *Coins of the Mughal Emperors*. Catalogue of Coins in the Provincial Museum Lucknow. Oxford.

Chaudhuri, J. N.
(1977) The Jats. *The History and Culture of the Indian People*, vol.8, pp. 152–61. Bombay.

Coomaraswamy, A. K.
(1928–31) *Yakṣas*. Part I & II. Washington. Repr. New Delhi 1971.

Czuma, St.J. & Morris, R.
(1985) *Kushan Sculpture: Images from Early India*. Exhibition Catalogue of the Cleveland Museum of Art.

Denisov, E. P.
(1976) Novye Materialy po Kuschanskoj Probleme (Issledovanija cholme Sonkh – Mathura). *Narody Asii i Afriki*, pp. 151–57.

Gaur, R. C.
(1983) *Excavations at Atrañjīkherā (Early Civilization of the Upper Gaṅgā Basin)*. Delhi-Patna-Varanasi.

Göbl, R.
(1984) *System und Chronologie der Münzprägung des Kušānreiches*. Wien.

Growse, F. S.
(1883) *Mathurā: A District Memoir*. 3rd ed. Oudh.

Grünwedel, A.
(1901) *Buddhist Art in India*. London.

Güntert, F.
(1973) Nordindische Bauernhäuser. *Baumeister 3*. München.

Gupta, P. L.
(1973) A Kushana Coin with Brahmi Legend. *JNSI* XXXV, PP. 123–26.
(1975) Copper Punch-marked Coins from Sonkh. *JNSI* XXXVII, pp. 1–12, pls.I-IV.
(1989) Early Coins of Mathura Region. *Mathura (The Cultural Heritage)*. Ed. D.M.Srinivasan, pp. 124–39. New Delhi.

Gupta, S. P.
(1980) *The Roots of Indian Art*. Delhi.
(1985) *Kushana Sculptures from Sanghol (1st-2nd Century A.D. – A Recent Discovery)*, vol.I. National Museum New Delhi.

Härtel, H.
(1966–73) Short communications on Sonkh excavations in *Indian Archaeology – A Review* 1966–67, pp. 40–43; 1968–69, pp. 40; 1969–70, pp. 42–43; 1970–71, pp. 39–40; 1971–72, pp. 47–48; 1972–73, pp. 33–35.
(1967) Mathura. Grabungskampagne 1966/67 am Hügelplateau von Sonkh. *Jahrbuch Stiftung Preußischer Kulturbesitz* IV, pp. 155–64. Köln und Berlin.
(1968^{1}) Excavations at Sonkh (Mathura District) 1966/67. *BMA* 1, pp. 3–8, figs. 1–4. Lucknow.
(1968^{2}) Excavation at Sonkh (Mathura District) 1967/68. *BMA* 2, pp. 3–5, figs. 1–4. Lucknow.
(1969^{1}) Excavations at Sonkh (Mathura District) 1968/69. *BMA* 3, pp. 1–5, figs. 1–5. Lucknow.
(1969^{2}) New Kuṣāṇa Finds from Sonkh. *BMA* 3, pp. 71–72, figs. 1–3. Lucknow.
(1969^{3}) Ausgrabungen im Mathura Distrikt. Grabungskampagnen 1967/68 und 1968/69 am Hügel von Sonkh. *Jahrbuch Stiftung Preußischer Kulturbesitz* VI, pp. 162–74. Köln und Berlin.
(1970^{1}) Grabungskampagne 1969/70 am Hügel von Sonkh. *Jahrbuch Stiftung Preußischer Kulturbesitz* VII, pp. 264–72. Köln und Berlin.
(1970^{2}) Excavations at Sonkh (Mathura District) 1969–70. *BMA* 5–6, pp. 1–4, figs. 1–5. Lucknow.
(1972) Grabungskampagne 1970/71 am Hügel von Sonkh. *Jahrbuch Preußischer Kulturbesitz* IX, pp. 214–22. Köln und Berlin.
(1973^{1}) Die Kuṣāṇa-Horizonte im Hügel von Sonkh (Mathura). *Indologentagung 1971*, pp. 1–24. Wiesbaden.
(1973^{2}) A Kuṣāṇa Nāga Temple at Sonkh. *BMA* 11–12, pp. 1–6, figs. 1–5. Lucknow. Reprinted in *Braj Susama* 1974, pp. 1–6 (Mathura Museum Centenary Number).
(1974^{1}) Ausgrabungen in Indien. *Berichte aus den Staatlichen Museen Preußischer Kulturbesitz*, 3. Folge, Nr. 2, pp. 7–11. Berlin.
(1974^{2}) Neue Forschungsergebnisse der Grabungskampagne in Indien (1971/72 und 1972/73). *Jahrbuch Stiftung Preußischer Kulturbesitz* XI, pp. 160–73. Köln und Berlin.
(1974^{3}) The Apsidal Temple No. 2 at Sonkh. *SAA* 1973, pp. 103–10, pls.51–56. Leiden.
(1976^{1}) Die Grabung am Hügel von Sonkh – Schlußbericht. *Jahrbuch Stiftung Preußischer Kulturbesitz* XII, pp. 125–49. Berlin.
(1976^{2}) Aspects of Early Nāga Cult in India. *Journal of the Royal Society of Art*, pp. 663–83. London.
(1976^{3}) Some Results of the Excavations at Sonkh. A Preliminary Report. *German Scholars on India* II, pp. 69–99. Bombay. Reprinted under the title "The Excavations at Sonkh. An Exhibition at the National Museum New Delhi and at Museums in Uttar Pradesh, 1977–78".

(1986) Berliner forschen in Indien. *Die Großen Abenteuer der Archäologie* 7, ed. H. G. Niemeyer/R. Pörtner, pp. 2680–90. Salzburg.
(1989) Pottery of Mathura. *Mathurā (The Cultural Heritage)*. Ed. D.M Srinivasan, pp. 181–92. New Delhi.
(1990) Terracotta Types of Mother Goddess from Kṣatrapa Levels at Sonkh. *Marakanda. Essays in Honour of Dr. James C. Harle*. Ed. Cl. Bautze-Picron, pp. 23–25, figs. 1–12. Delhi.
(1992) Early Durga Mahisasuramardini Images: A Fresh Appraisal. *Eastern Approaches. Essays on Asian Art and Archaeology. Delhi.*

Joshi, M. C.
(1971) *Dig*. Archaeological Survey of India. 2nd. ed. New Delhi.

Joshi, M. C. & Sinha, A. K.
(1978–79) Chronology of Mathura – An Assessment. *Purātattva* 10, pp. 39–44. New Delhi.

Joshi, N. P.
(1966) *Mathura Sculptures*. Mathura.
(1986) *Mātṛkās – Mothers in Kuṣāṇa Art*. New Delhi.
(1989) Miniature Votive Tablets & Figures showing Brahmanical Deities. *Essays on Indology, Polity and Administration* 1. Delhi.

Kala, S. C.
(1977) Terracotta Goddess with Fish. *Prachya Pratibha* IV, no. 1, pp. 33–41.
(1980) *Terracottas in the Allahabad Museum*. New Delhi.

Kreisel, G.
(1989) *Sundari die Schöne (Terrakotta-Kunst aus Indien)*. Stuttgart.

Lahiri, B.
(1974) *Indigenous States of Northern India (Circa 200 B.C. to 320 A.D.)*. Calcutta.

Lal, B. B.
(1954–55) Excavation at Hastināpura and other Explorations in the Upper Gangā and Sutlej Basins 1950–52 : New Light on the Dark Age between the End of the Harappā Culture and the Early Historical Period. *AI* 10 & 11, pp. 5–151. New Delhi.

Lüders, H.
(1961) *Mathurā* Inscriptions (Unpublished Papers) ed. by Klaus Janert. Göttingen.

MacDowall, D. W.
(1989) The Pattern of the Kuṣāṇa Copper Coinage and the Role of Mathurā. *Mathurā (The Cultural Heritage)*. Ed. D. M. Srinivasan, pp. 153–61. New Delhi.

Marshall, J.H.
(1911–12) Excavations at Bhita. *ASIAR*, pp. 29 ff.

Mitchiner, M.
(1979) *Non-Islamic States & Western Colonies AD 600–1979*. Oriental Coins and their Values. London.

Mode, H.
(1986) *Mathura (Metropole Altindischer Steinskulptur)*. Leipzig und Weimar.

Mukherjee, B. N.
(1973) An Interesting Coin from Sonkh, Mathura. *Asiatic Society, Monthly Bulletin*, vol. II, no. 8. Calcutta.
(1977) The "Abhisheka of Lakshmī" Motif on Coins of the Mitra Rulers of Mathura. *JNSI* XXXIX, pp. 155–6.
(1983) A New Mahākṣatrapa Ruler. *JASB* XX.25, pp. 108 f.

Mukherjee, B.N. & Lee, P.K.D.
(1988) *Technology of Indian Coinage*. Calcutta.

Narain, A. K.
(1989) Ancient Mathura and the Numismatic Material. *Mathura (The Cultural Heritage)*. Ed. D. M. Srinivasan, pp. 115–18. New Delhi.

Poster, A. G.
(1986) *From Indian Earth (4000 Years of Terracotta Art)*. Exhibition Catalogue of the Brooklyn Museum. New York.

Prasad, H. K.
(1960) The Nāga Cult in Bihar. *JBRS* 46, pp. 129–34.

Qanungo, K. R.
(1925) *History of the Jats*. Calcutta.

Ray, S. C.
(1988) Stratigraphic Evidence of Coins from Excavations at Mathura. *Studies in Ancient Indian History (D. C. Sircar Comm. Vol.)*, pp. 375–84. Delhi.

Sahni, B.
(1945) *The Technique of Casting Coins in Ancient India*. MNSI III. Bombay.

Serditykh, Z.
(1986) Towards the 150th Anniversary of the First Archaeological Discoveries in Mathura. *International Association for the Study of the Cultures of Central Asia, Information Bulletin* 10, pp. 75–78. Moscow.

Sharma, G. R.
(1960) *The Excavations at Kauśāmbī (1957–59)*. Allahabad.
(1969) *Excavations at Kauśāmbī 1949–50*. MASI 74. Delhi.

Sharma, R. C.
(1971) *Mathura Museum Introduction*. 1st Ed.. Mathura.
(1978) Antiquarian Wealth from Sonkh. *The Heritage of India (L.N.Mishra Comm.Vol.),* pp. 183–87, pls. VI-VII. Bodh Gaya.
(1984) *Buddhist Art of Mathurā*. Delhi.

Tewari, S. P.
(1986) Identification of a Naga Panel delineated on a door lintel from Sonkh. *Dimensions of Indian Art (Pupul Jayakar Seventy*, pp. 523–32. Delhi.

Tiwari, G. S.
(1984) Mathurā kī dhātu mūrtiyām. *Uttar Pradesh*, p. 200.

Verma, T. P.
(1989) Progress of Modification of the Alphabet as Revealed by Coins, Seals and Inscriptions from Mathurā. *Mathurā (The Cultural Heritage)*. Ed. D. M. Srinivasan, pp. 261–97. New Delhi,

Wright, H. N.
(1936) *The Coinage and Metrology of the Sultans of Delhi*. Delhi.

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ISBN 3-496-02503-4

DIETRICH REIMER VERLAG